SLV-625/NC/NP/UB/VP
RMT-V118

SERVICE MANUAL

AEP Model
SLV-625

North Europian Model
SLV-625NC

Spanish Model
SLV-625NP

UK Model
SLV-625UB

Germany Model
SLV-625VP

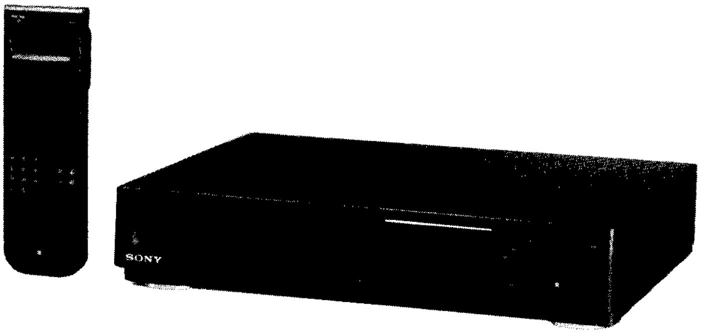


Photo : SLV-625NP

- **Refer to the SERVICE MANUAL of VHS MECHANICAL ADJUSTMENT II for MECHANICAL ADJUSTMENTS. (9-972-816-11)**

VHS Hi-Fi

SPECIFICATIONS

Channel coverage

	SLV-625/625NC/625VP/625NP
	VHF channels E2 – E12 (A to H only for Italy)
	CATV channels S01 – S03
	CATV channels S1 – S20
	HYPER S21 – S41
	UHF channels E21 – E69
	SLV-625UB
	UHF channels B21 – B68

Inputs and Outputs

Video inputs	EURO-AV, CANAL PLUS: 21-pin (pin 20) LINE IN 2: phono jack
Audio inputs	EURO-AV, CANAL PLUS: 21-pin (pins 2 and 6) LINE IN 2: phono jacks
Video outputs	EURO-AV, CANAL PLUS: 21-pin (pin 19) LINE OUT: phono jack
Audio outputs	EURO-AV, CANAL PLUS: 21-pin (pins 1 and 3) LINE OUT: phono jacks
Microphone input	Minijack

General

Power requirements	240 V AC, 50Hz (SLV-625UB) 220 – 230 V AC, 50Hz (SLV-625/625NC/625VP/625NP)
Power consumption	30W
Operating temperature	5° C to 40° C (41°F to 104°F)
Storage temperature	–20° C to 60° C (–4° F to 140° F)
Dimensions	Approx. 430 × 87 × 366mm (w/h/d) (17 × 3 3/8 × 14 1/2 inches) including projecting parts and controls
Weight	Approx. 5.8kg (12lb 13oz)

Accessories Supplied

- Wireless Remote Commander RMT-V118 with two R6 batteries (1)
- 75-ohm coaxial cable (1)
- AC power cord (1)
- Video/Audio connecting cable (phono 3 ⟷ phono 3) (1)
- Screw driver (1)

Design and specifications are subject to change without notice.

Note

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

VHS VIDEO CASSETTE RECORDER

SONY®

MICROFILM

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

TABLE OF CONTENTS

Section Title Page

SERVICE NOTE 5

1. GENERAL

Connecting Peripheral Equipment 7
Preparing the Remote Commander 10
Setting the Date and Time 10
Adjusting the TV 11
Presetting the Active Channels 12
Changing the Mode Setting 15
Playback 15
Recording 19
Timer-Activated Recording 23
Variable Speed Playback —DUAL MODE SHUTTLE 29
Assigning a Desired Operation —AUTO MENU 31
Indexing 32
Quick-Timer Recording 34
Editing 35
Identifying Parts and Controls 37

2. DISASSEMBLY

2-1. Removal of Upper Case, Bottom Plate and Front Panel Assemblies 41
2-2. Removal of Control SW Block Assembly 41
2-3. Opening of YC-122 Board 42
2-4. Removal of MF-162 Block Assembly 42
2-5. Removal of Power Block 43
2-6. Removal of FL Cassette Compartment Assembly 43
2-7. Removal of Mechanism Deck Block Assembly 44
2-8. Removal of CP-54, CP-55, HF-22 and OS-13 Boards 44
2-9. Removal of MA-138 Board 45
2-10. Internal Views 46

3. DIAGRAMS

3-1. Circuit Boards Location 47
3-2. Overall Block Diagram 48
3-3. Video Block Diagram 50
3-4. Servo Block Diagram 53
3-5. System Control Block Diagram 55
3-6. Servo/System Control—Microcomputer Pin Function (MA-138 Board IC101 CXP80624) 57
3-7. System Control—Video Block Interface 59
3-8. System control—Servo Peripheral Circuit Interface 61
3-9. System Control—Mechanism Block Interface 63
3-10. System Control—System Control Peripheral Circuit Interface 65
3-11. System Control—Audio Block Interface 65
3-12. Audio Block Diagram 67
3-13. Timer/Tuner/Mode Control Block Diagram 71
3-14. Timer/Mode Control—Microcomputer Pin Function (CXP50116:IC301 on MF-162 Board) 73
3-15. Tuner Block Diagram 76
3-16. CANAL PLUS Block Diagram (SLV-625NP ONLY) 79
3-17. Power Block Diagram 81

4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-1. Frame Schematic Diagram 83
4-2. Printed Wiring Boards and Schematic Diagrams 86
- RP-63 Board 86
- YC-122 Board 92
- MA-138 (Servo, System Control, Audio) Board 99
- SS-147, OS-13 Boards 106
- MD-55, CA-41 Boards 112
- HF-22 Board 118
- MF-162, MF-163, MF-164 Boards 125
- MA-138 (Tuner, NICAM) Board 132
- CP-54, CP-55 Boards (SLV-625NP ONLY) 138
- Power Block 143
4-3. Semiconductors 147

Section Title Page

5. EXPLODED VIEWS

5-1. Front Panel and Cabinet Assemblies ············ 149
5-2. Mode Control and Power Block Assemblies ······ 150
5-3. Main Board Assembly ···································· 151
5-4. FL Cassette Compartment Assmbly ················· 152
5-5. Mechanism Chassis Assembly (1) ·················· 153
5-6. Mechanism Chassis Assembly (2) ·················· 154
5-7. Mechanism Chassis Assembly (3) ·················· 155

6. ELECTRICAL PARTS LIST ······························· 156

HARDWARE LIST ··· 175

7. ELECTRICAL ADJUSTMENTS

7-1. Pre-Adjustment Preparations ······················· 177
  7-1-1. Instruments to be Used ·························· 177
  7-1-2. Connection ·· 177
  7-1-3. Setup for Adjustment ···························· 177
  7-1-4. Alignment Tape (MH-2) ··························· 177
  7-1-5. Specified I/O Level and Impedance ········· 178
  7-1-6. Adjusting Sequence ································ 178
7-2. Power Supply Check ································· 178
7-3. System Control Adjustment ························· 179
  7-3-1. Clock Oscillation Frequency Check ········· 179
7-4. Servo System Adjustment ··························· 179
  7-4-1. Switching Position Adjustment ··············· 179
7-5. Video System Adjustments ························· 180
  7-5-1. Playback Y Signal Level Adjustment ········· 180
  7-5-2. Y Signal NR Level Adjustment ················· 180
  7-5-3. Sync AGC Adjustment ····························· 180
  7-5-4. Sync Tip Carrier Set and Deviation Adjsutments ·· 181
  7-5-5. White Clip and Dark Clip Adjustment ······ 181
  7-5-6. Recording Y Signal Level Adjustment ······ 181
  7-5-7. Recording Chroma Level Adjustment ········· 182
7-6. Character Generator System Adjustments ······ 182
  7-6-1. Character Generator Clock Check ············ 182
  7-6-2. AFC Adjustment ······································· 182
  7-6-3. Character Position Adjustment ··············· 183
7-7. Audio System Adjustments ·························· 183
  7-7-1. Hi-Fi Audio System Adjustment ··············· 183
    1. VCO fo adjustment ································· 184
    2. Deviation adjustment ······························ 184
    3. BPF fo adjustment ································· 184
    4. AFM switching adjustment ······················· 184
    5. Hi-Fi/NORMAL discrimination adjustment ··· 185
  7-7-2. Normal Audio System Adjustment ············· 185
    1. ACE head adjustment ······························ 185
    2. Recording bias adjustment ······················ 185
    3. Overall level check ································ 185
7-8. Tuner System Adjustments ··························· 186
  7-8-1. RF AGC Adjsutemnt ································ 186
  7-8-2. Receive Separation Adjustment ··············· 186
7-9. Arrangement Diagram for Adjustment Parts ··· 188

SERVICE NOTE

1. RETURNING PINCH ROLLER, GUIDE ROLLER AND ELEVATOR CAM TO STOP CONDITION

1) Remove the bottom panel.
2) Turn the worm gear Ⓐ of the cam motor, located at lower of the MD, to the arrow direction Ⓑ by finger.

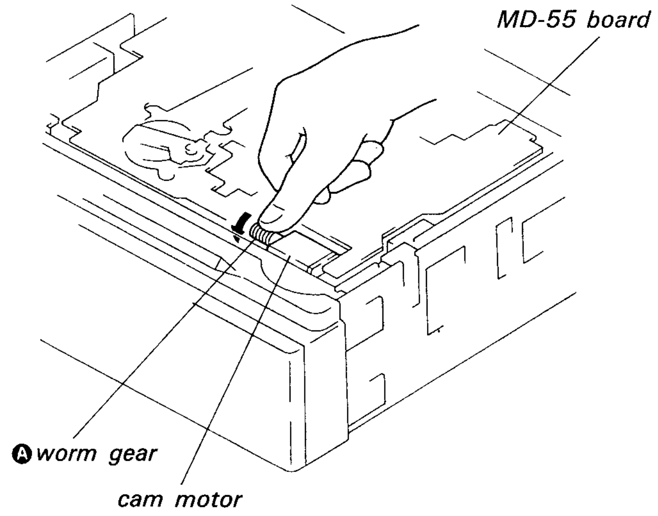

MD-55 board
Ⓐ worm gear
cam motor

Fig. 1.

2. WINDING TAPE TO CASSETTE HALF

Turn the fly wheel Ⓐ of the capstan motor to the arrow direction Ⓑ by finger, then the cassette tape will be wound to the cassette half.

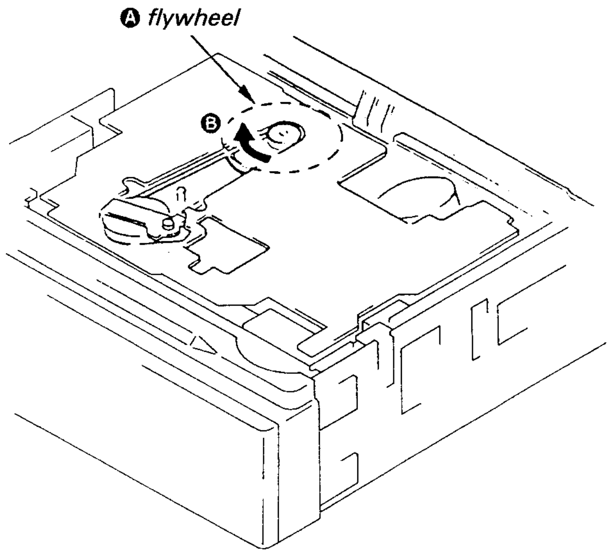


Fig. 2.

3. TAKING OUT CASSETTE WHEN UNIT IS DEFECTIVE WITH CASSETTE IN

1) Remove the upper case.
2) Turn the worm gear Ⓐ of the FL cassette compartment motor to the arrow direction Ⓑ by finger.

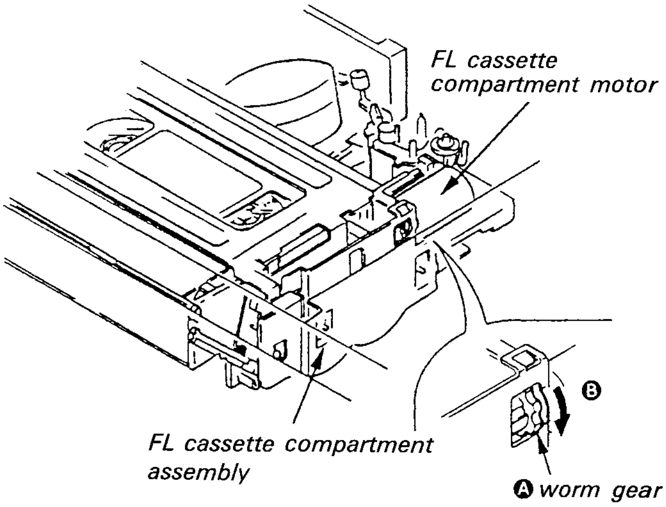

FL cassette compartment motor
FL cassette compartment assembly
Ⓑ
Ⓐ worm gear

Fig. 3.

Note: When performing 1. to 3., be careful not to clog and damage the cassette tape.

4. UPPER DRUM REPLACEMENT

4-1. Removal of Upper Drum

1) Remove the screw ❶ (P3×5) and take out the grounding shaft ❷. (See Fig. 4.)
2) Completely remove the rotary upper drum board and desolder the soldering indicated by the arrows (12 points).
3) Remove two screws ❸ (PSW3×8) and take out the rotary upper drum in the arrow direction Ⓐ. (See Fig. 5.)
   If it is difficult, remove by shaking the rotary upper drum gradually.

Note: If the drum can not be removed, check whether the solders have been removed or not again.

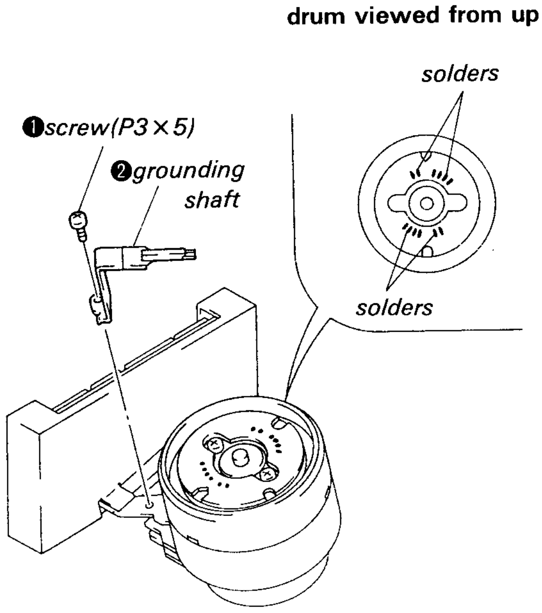


Fig. 4.

4-2. Mounting Upper Drum

1) When inserting the rotary drum into the lower drum, be careful not to blur the contacting surface with fingerprint or the like.
2) Mount the rotaly upper drum board by aligning marked ➡ with marked ⇛ of rotary transformer board (lower drum) so that the screw holes of both upper and lower drums match. (See Fig.5.)
3) If it is difficult, mount the upper drum by shaking it gradually.
   Note: Be careful not to damage the head. Make sure that the upper drum is tightly inserted.
4) Tighten two screws ❸ (PSW3×8). (See Fig. 5.)
   Note: Temporary tighten two screws. After making sure that upper drum is tightly inserted, tighten the screws.
5) Solder 12 points on the board of the rotary upper drum.
6) Fix the grounding shaft ❷ using the screw ❶ (P3×5) so that the protrusion of grounding shaft end contacts the center of the drum shaft.
   Note: When attaching the grounding shaft ❷, be careful not to apply force to the spring section of it.

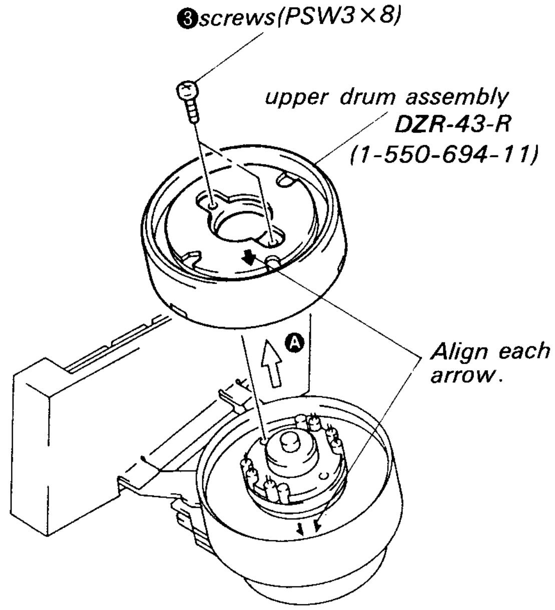
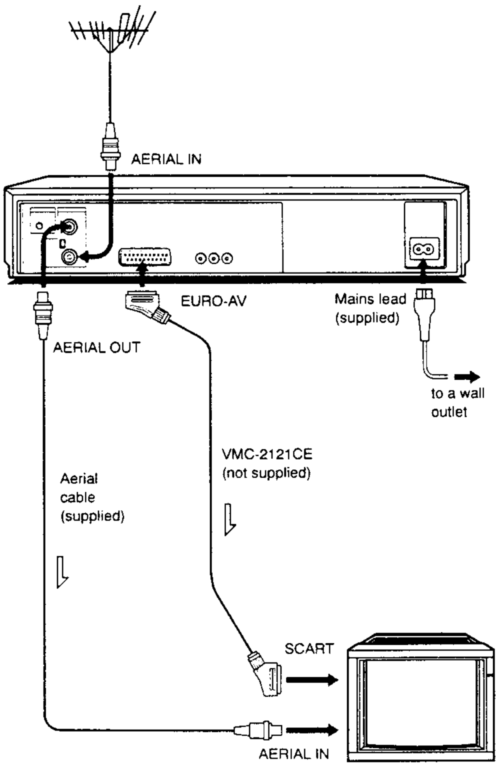


Fig. 5.

SECTION 1
GENERAL

This section is extracted from SLV-625/625NC/625UB /625VP instruction manual.

Connecting Peripheral Equipment


AERIAL IN
EURO-AV
Mains lead (supplied)
AERIAL OUT
to a wall outlet
VMC-2121CE (not supplied)
Aerial cable (supplied)
SCART
AERIAL IN

Turn all the power off before making any connections.
Connect the power cord (mains lead) last.

Connecting an Aerial and a TV

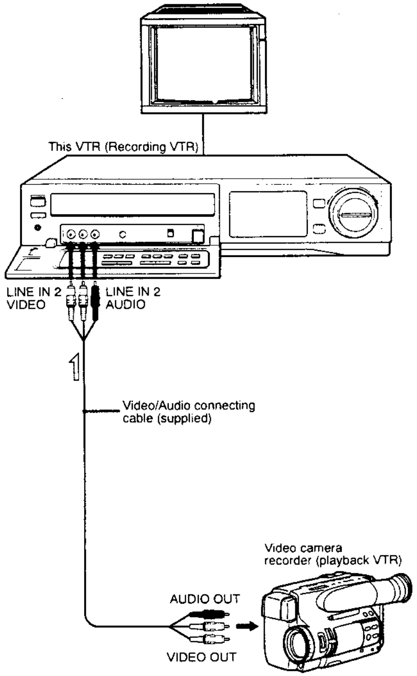
1 **Disconnect the aerial from the aerial input terminal of the TV and reconnect it to the AERIAL IN of the VTR.**

2 **Connect the AERIAL OUT of the VTR to the aerial input terminal of the TV, using the supplied aerial cable.**

Note:
Connect the plugs firmly to avoid picture distortion.

If your TV is equipped with a 21-pin SCART connector
You can obtain a higher quality picture by connecting the EURO-AV of the VTR to the SCART connector of the TV. In this case, you need a VMC-2121CE cable (not supplied).

Important:
When you connect your VTR and TV via the EURO-AV connector, open the menu and set "RF MOD" (RF Modulator) to "OFF".
For details, see "Changing the Mode Setting" on page 21.

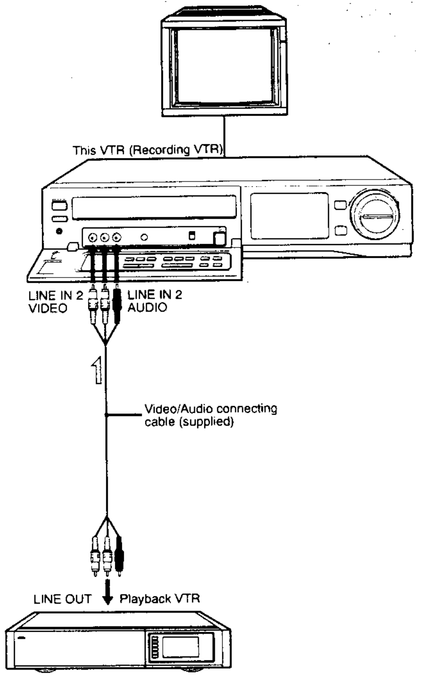

This VTR (Recording VTR)
LINE IN 2
VIDEO
LINE IN 2
AUDIO
1
Video/Audio connecting cable (supplied)
Video camera recorder (playback VTR)
AUDIO OUT
VIDEO OUT

Connecting a Video Camera Recorder

This connection allows you to record and edit the playback output of a video camera recorder.

Connect the LINE IN 2 VIDEO/AUDIO of this VTR to the LINE OUT VIDEO/AUDIO of the video camera recorder, using the supplied Video/Audio connecting cable.

Note:
If the video camera recorder is a monaural type, connect only the white plug for audio both on the video camera recorder and this VTR.

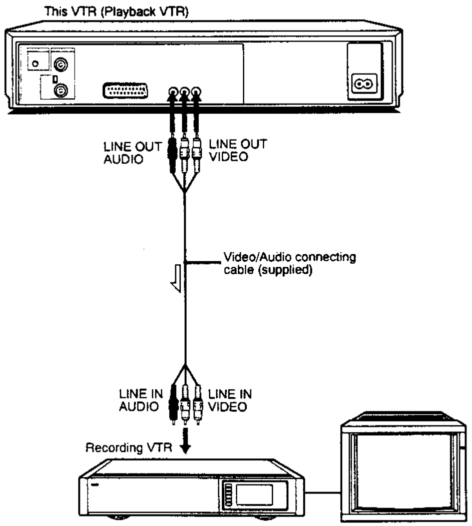

This VTR (Recording VTR)
LINE IN 2
VIDEO
LINE IN 2
AUDIO
1
Video/Audio connecting cable (supplied)
LINE OUT
Playback VTR

Connecting Another VTR

This connection allows you to record and edit the playback output from or onto another VTR.

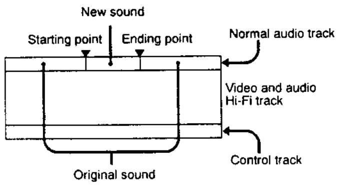
- **When this VTR is used as a recording VTR**
  Connect the LINE IN 2 VIDEO/AUDIO of this VTR to the LINE OUT of the playback VTR.

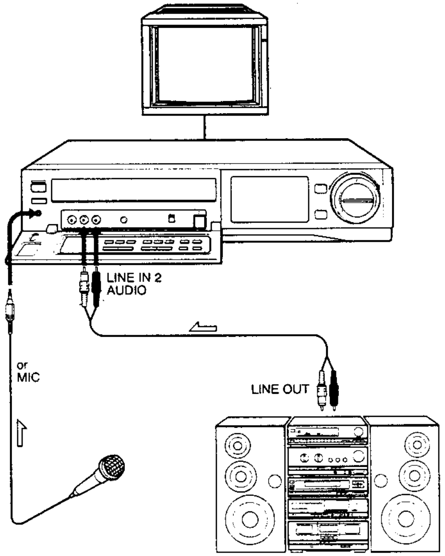
Note:
If the playback VTR is not equipped with phono type Video/Audio output connectors, but is equipped with a EURO-AV connector, make the connection using the VMC-2103 cable (not supplied).


This VTR (Playback VTR)
LINE OUT AUDIO
LINE OUT VIDEO
Video/Audio connecting cable (supplied)
LINE IN AUDIO
LINE IN VIDEO
Recording VTR

- **When this VTR is used as a playback VTR**
  Connect the LINE OUT of this VTR to the LINE IN of the recording VTR using the supplied Video/Audio connecting cable.

Note:
If the other VTR is a monaural type, connect only the white plug for audio on both the VTRs.


New sound
Starting point
Ending point
Normal audio track
Video and audio Hi-Fi track
Control track
Original sound


LINE IN 2 AUDIO
or MIC
LINE OUT

Connecting Audio Equipment

This connection allows you to perform audio dubbing. Using the audio dubbing function, you can easily record and add narration or the desired audio source to the normal audio track of a pre-recorded tape. (See the diagram on the left.)

- **When you do audio dubbing**
  You can replace only the sound pre-recorded on the normal audio track with a new monaural sound. The picture and pre-recorded Hi-Fi sound are retained.

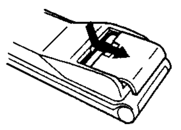
Connection
Connect the LINE IN 2 AUDIO of this VTR to the LINE OUT of audio equipment.

If you use a microphone, connect it to the MIC jack of the VTR.

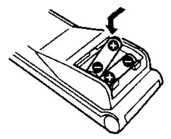
Note on connecting a microphone:
The MIC jack of this model is adaptable with the use of a monaural mini-plug. If the plug used for your microphone is a stereo mini-plug, use a plug adaptor such as the PC-236MS or the PC-236HMS.

Preparing the Remote Commander

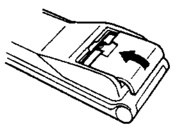
1

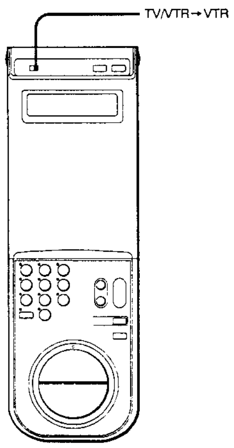


2



3





Inserting Batteries

1 **Slide back the cover to remove it.**

2 **Insert two R6 (size AA) batteries so that the ⊕ and ⊖ polarities match the polarity diagrams inside the battery compartment.**

3 **Close the cover.**

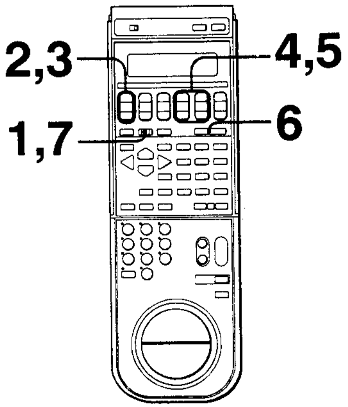
Note on batteries:
In normal use, the batteries will last for about six months. However, if the Remote Commander will not be used for a long time, remove the batteries to avoid possible damage from battery leakage.

Operating the VTR with the Remote Commander

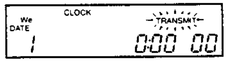
Set the TV/VTR remote control selector on the Remote Commander to VTR.

- **Controlling other Sony VHS-format VTRs**
  When operating other Sony VHS-format VTRs with this commander, set the commande mode selector on other Sony VHS-format VTRs to the "VTR3" position to receive the signal.

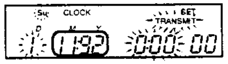
Setting the Date and Time



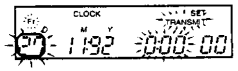
1



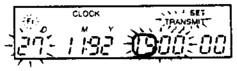
2



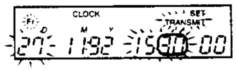
3



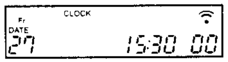
4



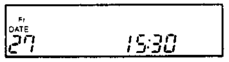
5



6



7



You can set the time and date between the years 1992 and 2007 with the Remote Commander.

- **Example: To set to 15:30, Friday, November 27, 1992**
  The + button is used to advance digits, and the − button is used to set digits back.

1 **Press CLOCK SET.**

2 **Hold down the D (DAY) button until 11 M (Month) 92 Y (Year) appears.**
When the day display goes beyond 30, the month advances.

3 **Press the + or − side on the D (DAY) button until 27 appears.**
The day of the week is set automatically.

4 **Press the H (Hour) button in the TURN OFF section to set the hour to 15.**

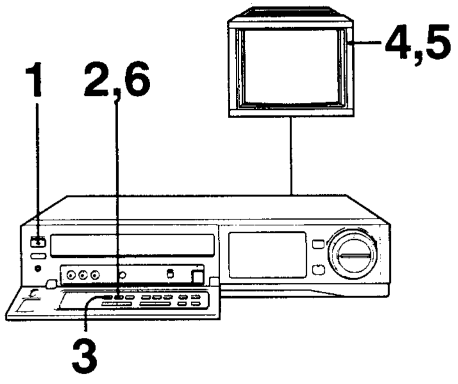
5 **Press the M (Minute) button in the TURN OFF section to set the minutes to 30.**

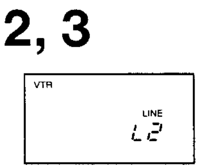
6 **Point the Remote Commander at the VTR and press TRANSMIT.**
When the date and time are transmitted to the VTR successfully, a beep sounds.

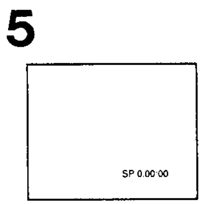
7 **Check the display window of the VTR to see if the display shows the current time, and press CLOCK SET.**

- **When a short beep sounds repeatedly**
  Transmission has failed. Check to see if the VTR is being used for timer-activated recording or quick-timer recording. Also check whether the VTR is in standby mode for timer-activated recording.
  In these cases, you cannot set the clock.

Adjusting the TV







If you have not made the TV-VTR connection via the EURO-AV connector, you need to make the following adjustment. Otherwise, you can skip the following procedures. Follow the procedure to determine the programme position for playing back a VTR picture (programme position for the VTR).

1 **Press ON/STANDBY.**

2 **Press INPUT SELECT to light up the LINE L2 indication in the display window on the VTR.**

Note:
Do not connect any equipment to the LINE IN 2 VIDEO jack.

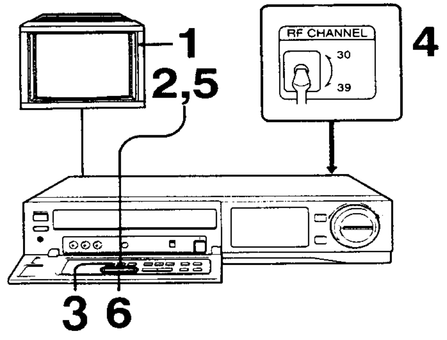
3 **Press TV/VTR to light up the VTR indication in the display window on the VTR.**

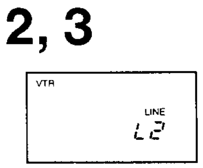
4 **Turn on the TV and select a programme position that is not used for receiving TV broadcasts.**

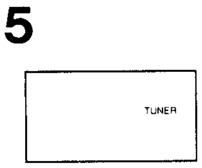
5 **Tune the TV so that a blue screen with the indication of the tape speed and tape counter appears clearly on the TV screen.**

6 **Press INPUT SELECT to light up the TUNER indication in the display window.**

The programme position for the VTR has now been set on your TV. You must select the programme position selected in step 4 whenever you want to view a VTR playback picture.







- **When the playback picture shows interference**
  You must readjust the programme position for the VTR you have determined to receive the VTR's playback signal.

1 **On the TV, select a programme position between UHF channels 30 and 39 so that no picture is seen on the TV screen and that a steady rustling sound or no sound is heard.**

2 **Press INPUT SELECT to light up the LINE L2 indication in the display window.**

Note:
Do not connect any equipment to the LINE IN 2 VIDEO jack.

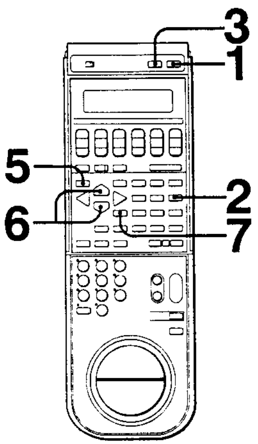
3 **Press TV/VTR to light up the VTR indication in the display window on the VTR.**

4 **Turn the RF CHANNEL screw on the rear of the VTR with the supplied screw driver so that the blue screen with the indication of a tape speed and tape counter appears clearly on the TV screen.**

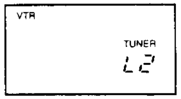
5 **Press INPUT SELECT to light up the TUNER indication in the display window.**

6 **Press PROGRAM – / – to see if the TV screen changes to a different channel.**

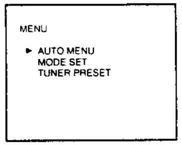
Presetting the Active Channels



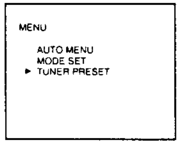
2, 3



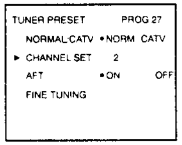
5


MENU
▶ AUTO MENU
MODE SET
TUNER PRESET

6


MENU
AUTO MENU
MODE SET
▶ TUNER PRESET

7


TUNER PRESET PROG 27
NORMAL·CATV •NORM CATV
▶ CHANNEL SET 2
AFT •ON OFF
FINE TUNING

To view and record a TV programme on the VTR, you must preset the channels. For presetting channels, call up the menu on the TV screen, then allocate channels in the desired order.

Calling up the TUNER PRESET Menu

1 **Turn on the VTR.**

2 **Press INPUT SELECT so that the TUNER indication and the programme position number light up in the display window of the VTR.**

3 **Press TV/VTR to light up the VTR indication in the display window on the VTR.**

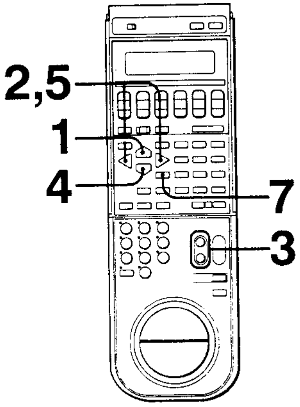
4 **Turn on the TV.**
If you have made the VTR-TV connection via the aerial socket, select the programme position for the VTR on the TV.

5 **Press MENU.**
The main MENU appears on the TV screen.

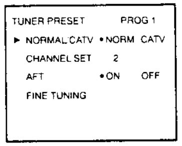
6 **Press ▲ or ▼ to move the cursor (▶) to TUNER PRESET.**

7 **Press EXECUTE.**
The TUNER PRESET menu appears on the TV screen.

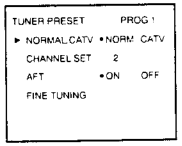
For SLV-625UB users:
The NORMAL/CATV selection does not appear.



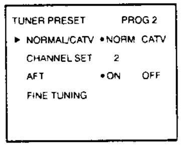
1


TUNER PRESET PROG 1
▶ NORMAL·CATV •NORM CATV
CHANNEL SET 2
AFT •ON OFF
FINE TUNING

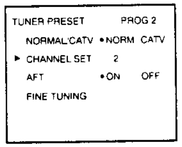
2


TUNER PRESET PROG 1
▶ NORMAL·CATV •NORM CATV
CHANNEL SET 2
AFT •ON OFF
FINE TUNING

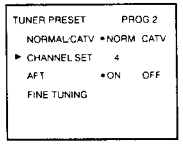
3


TUNER PRESET PROG 2
▶ NORMAL/CATV •NORM CATV
CHANNEL SET 2
AFT •ON OFF
FINE TUNING

4


TUNER PRESET PROG 2
NORMAL·CATV •NORM CATV
▶ CHANNEL SET 2
AFT •ON OFF
FINE TUNING

5


TUNER PRESET PROG 2
NORMAL·CATV •NORM CATV
▶ CHANNEL SET 4
AFT •ON OFF
FINE TUNING

Tuning a Desired Channel

After calling up the TUNER PRESET menu, you can allocate the channels to programme positions 1 to 60.

1 **Press ▲ to move the cursor (▶) to NORMAL/CATV.**
(For the SLV-625UB, skip this step.)

2 **Press ◀ or ▶ to move the dot (●) to NORM.**
If you want to tune in the CATV channel first, select CATV.
(For the SLV-625UB, skip this step.)

3 **Press PROG −/− (PROGRAM −/−) to select the desired programme position.**

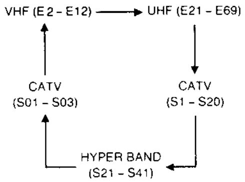
4 **Press ▼ to move the cursor (▶) to CHANNEL SET.**

5 **Press ◀ or ▶ to scan the channels.**
When the first channel received in your area is scanned, the channel number stops changing, the picture of that channel appears for about 5 seconds, and then the blue screen appears.
The illustration shows the display when channel 4 is scanned to programme position 2.

6 **To allocate other channels to the next programme position, repeat steps 1 to 5.**

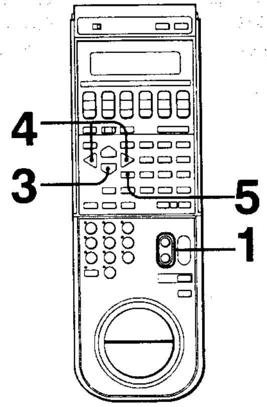
7 **Press EXECUTE to store all the allocated channels and to return to the original TV screen.**

■ Channel scanning order on your VTR
The scanning order when you press ▶ is as follows. (The scanning order is reversed when you press ◀.)

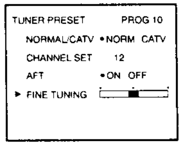


- The SLV-625UB only scans UHF channels B21 to B68.
- In Italy, channel numbers 13 to 20 correspond to channels A to H.

■ Allocating the Channels Directly
You can allocate the channels directly with the programme position number buttons. When you want to enter a single digit channel number, press 0 and the desired programme position number button. (For example, when you enter channel 5, press 0 and then 5.)
When you want to enter two-digit numbers, press the ten's digit number and then the unit's digit number. (For example, when you enter channel 24, press 2 and 4.)

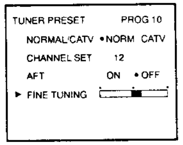


3



```
TUNER PRESET            PROG 10
   NORMAL/CATV   •NORM  CATV
   CHANNEL SET     12
   AFT           •ON  OFF
 ▶ FINE TUNING
```

4

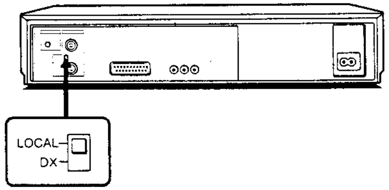


```
TUNER PRESET            PROG 10
   NORMAL/CATV   •NORM  CATV
   CHANNEL SET     12
   AFT            ON  •OFF
 ▶ FINE TUNING
```

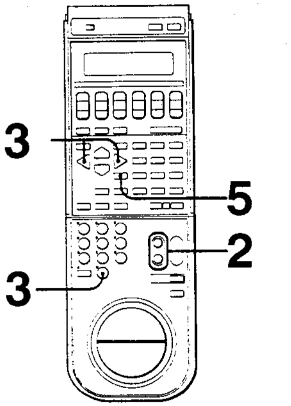
■ Fine Tuning — when you cannot get a clear picture
This VTR has been designed to tune in channels automatically. This function is called "Auto Fine Tuning" (AFT).
If the AFT does not produce a clear picture, you can also use the manual tuning function.

1. **Press PROG +/− (PROGRAM +/−) to select the programme position for which you can't get a clear picture.**
2. **Call up the TUNER PRESET menu.**
   (See "Calling up the TUNER PRESET Menu" on page 16.)
3. **Press ▼ to move the cursor (▶) to FINE TUNING.**
   The fine tuning meter appears.
4. **Press ◀ or ▶ so as to obtain the best possible picture.**
   Note that the dot (●) indicated beside "ON" of the AFT position moves automatically to "OFF".
5. **Press EXECUTE to store that position and to return to the original TV screen.**

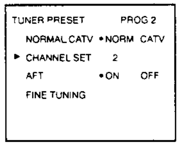
If the TV signal is too strong
The DX/LOCAL switch on the rear of the VTR is provided to strengthen or attenuate the reception signals. Normally set this switch to the DX position. If the reception signals are very strong, set it to the LOCAL position.



Presetting the Active Channels

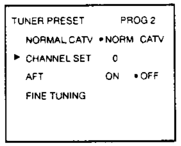


2



```
TUNER PRESET          PROG 2
   NORMAL CATV  •NORM  CATV
▶  CHANNEL SET    2
   AFT           •ON    OFF
   FINE TUNING
```

3



```
TUNER PRESET          PROG 2
   NORMAL CATV  •NORM  CATV
▶  CHANNEL SET    0
   AFT            ON   •OFF
   FINE TUNING
```

Disabling Unwanted Programme Positions

You can preset the channels so that only the desired programme positions appear when you press PROG + / − (PROGRAM + / −).

1 **Call up the TUNER PRESET menu.**
(See "Calling up the TUNER PRESET Menu" on page 16.)

2 **Press PROG + / − (PROGRAM + / −) to call up the unwanted programme position.**

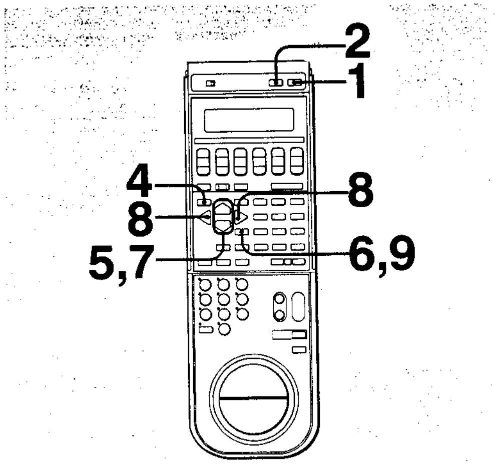
3 **Press 0 twice or hold down ◀ or ▶ until "0" appears on the CHANNEL SET position.**

4 **Repeat steps 2 and 3 to disable other unwanted programme positions.**

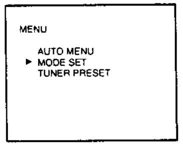
5 **Press EXECUTE to complete disabling and to return to the original TV screen.**

To enter the disabled programme position again, repeat steps in the section "Tuning a Desired Channel".

Changing the Mode Setting



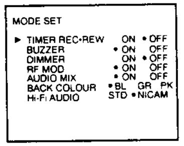
5



```
MENU

   AUTO MENU
▶  MODE SET
   TUNER PRESET
```

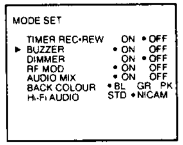
6



```
MODE SET

▶  TIMER REC•REW    ON  •OFF
   BUZZER         • ON   OFF
   DIMMER           ON  •OFF
   RF MOD         • ON   OFF
   AUDIO MIX      • ON   OFF
   BACK COLOUR    •BL   GR   PK
   Hi-Fi AUDIO    STD •NICAM
```

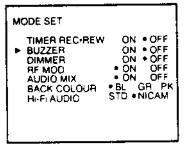
7



```
MODE SET

   TIMER REC•REW    ON  •OFF
▶  BUZZER         • ON   OFF
   DIMMER           ON  •OFF
   RF MOD         • ON   OFF
   AUDIO MIX      • ON   OFF
   BACK COLOUR    •BL   GR   PK
   Hi-Fi AUDIO    STD •NICAM
```

8



```
MODE SET

   TIMER REC•REW    ON  •OFF
▶  BUZZER           ON  •OFF
   DIMMER           ON  •OFF
   RF MOD         • ON   OFF
   AUDIO MIX      • ON   OFF
   BACK COLOUR    •BL   GR   PK
   Hi-Fi AUDIO    STD •NICAM
```

You can set the status of the VTR to your preference using this function. There are seven selections including TIMER REC-REW ON/OFF, BUZZER ON/OFF, DIMMER ON/OFF, RF MOD ON/OFF, AUDIO MIX ON/OFF, BACK COLOUR BL/GR/PK, Hi-Fi AUDIO STD/NICAM.
(Hi-Fi AUDIO is only for the SLV-625NC and SLV-625UB.)
Here, we explain DIMMER, BACK COLOUR and RF MOD. As for AUDIO MIX, refer to the section "Playback" on page 30. As for Hi-Fi AUDIO, refer to the section "Recording" on page 36. "Hi-Fi AUDIO (STD/NICAM)" is available only for the SLV-625NC and SLV-625UB.
The DIMMER ON/OFF selection makes the brightness of the display window dimmer or brighter. With the BACK COLOUR BL/GR/PK selection, you can change the background colour of the TV screen.
With the RF MOD ON/OFF, you can turn on or off the RF modulator.

1 **Turn on the VTR.**

2 **Press TV/VTR to light up the VTR indication in the display window on the VTR.**

3 **Turn on the TV.**
If you have made the VTR-TV connection via the aerial socket, select the programme position for the VTR on the TV.

4 **Press MENU.**
The main MENU appears on the TV screen.

5 **Press ▲ or ▼ to move the cursor (▶) to MODE SET.**

6 **Press EXECUTE.**
The MODE SET menu appears on the TV screen.

7 **Press ▲ or ▼ to move the cursor (▶) to the item which you want to change.**

8 **Press ◀ or ▶ to move the dot (●) to the item which you want to change.**

9 **Press EXECUTE to return to the original TV screen.**

Note:
The position of the cursor remains the same as long as the power cord is connected.

Changing the Mode Setting

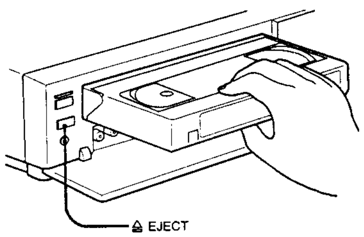
When you select "DIMMER"
Moving the dot (●) to the "ON" position makes the display window dimmer.
Moving the dot (●) to the "OFF" position makes the display window brighter.

When you select "BACK COLOUR"
Move the dot (●) to BL (blue), GR (green), or PK (pink).

When you select "RF MOD" (RF Modulator)
Choose "ON" if you have made the VTR-TV connection via the aerial socket only.
Choose "OFF" if you have made the VTR-TV connection via the EURO-AV connector.
When interference occurs if you use the aerial socket, make the EURO-AV connection and set RF MOD to "OFF".

Note:
Never set RF MOD to "OFF" when you have made the VTR-TV connection via the aerial socket only.

Playback



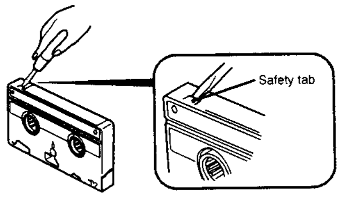
This section shows you how to insert a video cassette into the VTR and to play it back.

Inserting a Video Cassette

1 **Insert a video cassette with the window facing upwards.**

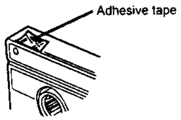
2 **Gently press the center of the front side of the cassette until the mechanism draws it into the compartment.**
When the cassette has been loaded, the cassette indicator (▭) lights in the display window of the VTR and the VTR turns on automatically.

Note:
When you insert a cassette without a safety tab, playback starts automatically.

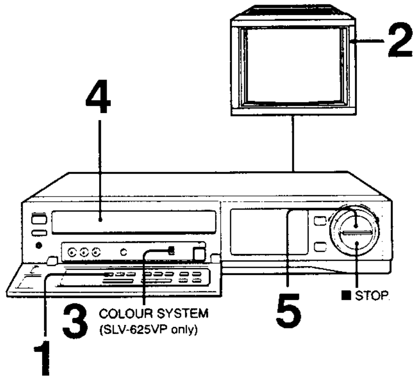


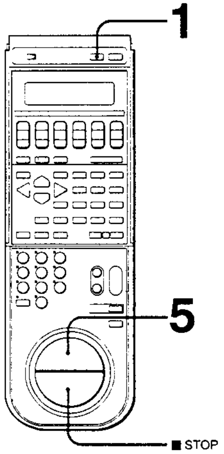
- **Ejecting the cassette**
  Press ⏏ EJECT on the VTR.
  You can eject the cassette even when the power is off. When you press ⏏ EJECT, the power goes on. After the cassette is ejected, the power goes off.

- **Protecting your cassette against accidental erasure**
  The cassette is provided with a safety tab to protect against accidentally erasing a previous recording. Break off the safety tab with a screw driver or a similar tool as shown on the illustration. If the safety tab is removed, the VTR ejects the cassette when you try to record on the cassette.



To record on a cassette with the safety tab broken off, simply cover the tab hole with adhesive tape.





Playing Back the Cassette

1. **Press TV/VTR to light up the VTR indication in the display window on the VTR.**

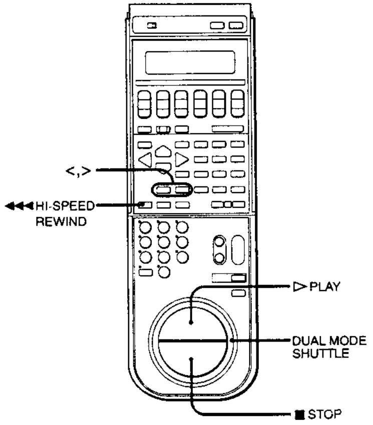
2. **Turn on the TV.**
   If you have made the VTR-TV connection via the aerial socket only, select the programme position for the VTR on the TV.

3. **For SLV-625VP users :**
   Open the drop-down panel and set the COLOUR SYSTEM selector to PAL or MESECAM.
   Normally set COLOUR SYSTEM to PAL. To play back a tape recorded in the MESECAM colour system, set to MESECAM.

4. **Insert a cassette into the cassette compartment.**
   If your cassette has no safety tab, playback starts automatically (auto playback).

5. **Press ▷ PLAY.**
   Playback starts.
   When the tape reaches the end, the VTR rewinds the tape automatically.

To stop playback
Press ■ STOP.

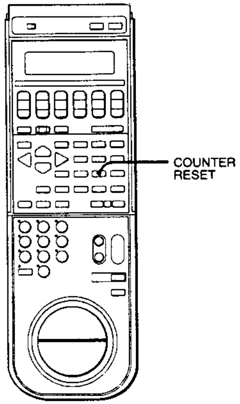


To play back in the reverse direction
Press < on the Remote Commander during playback.
If you want to playback in the forward direction again, press ▷ PLAY or >.

To fast forward the tape
Press ■ STOP, then turn the DUAL MODE SHUTTLE ring clockwise.

To rewind the tape
Press ■ STOP, then turn the DUAL MODE SHUTTLE ring counterclockwise.
To rewind the tape at higher speed, press ◀◀◀ HI-SPEED REWIND.

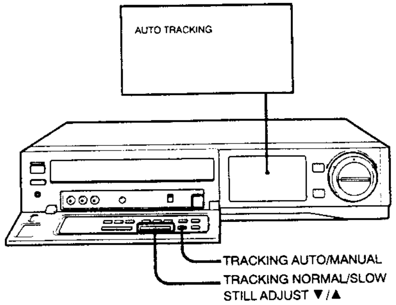
Note:
When you use a short tape, such as an E-30, VHS-C cassette, or a non-standard tape, the rewinding speed may be slower than usual.

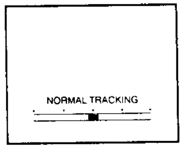


■ To adjust the sharpness of the picture
Turn the SHARPNESS controll inside the front panel of the VTR. Turn to SHARP to get a sharper picture, and to SOFT to get a softer picture.

■ Resetting the Tape Counter
You can use the tape counter as a reference to locate a desired scene after playback is completed.
Press COUNTER RESET on the Remote Commander to reset the counter to "0H00M00S" (counter zero position) before you start to play back the tape.
After playback is completed, rewind the tape to the counter zero position. When you re-insert the cassette, the counter is set to "0H00M00S" automatically.

Note:
When a portion without video signals on the tape is played back, the counter does not work and the counter reading does not change.





Adjusting the Picture Manually

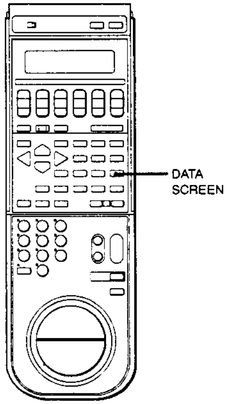
Normally you can get optimum tracking since the auto tracking function of the VTR activates whenever you insert a pre-recorded cassette.

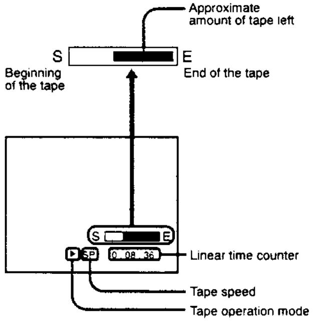
■ The auto tracking function works as follows
The AUTO TRACKING indicator flashes in the display window while the VTR searches for the best tracking.

When the VTR has obtained the best possible tracking, the AUTO TRACKING indicator lights in the display window of the VTR.
However, if noise appears on the picture, adjust the tracking as follows (Manual Tracking Adjustment).

Press "TRACKING NORMAL/SLOW and STILL ADJUST ▼ or ▲" to obtain the best possible picture.
The tracking meter appears on the TV screen and the AUTO TRACKING indicator goes off.
To return to the auto tracking adjustment, press TRACKING AUTO/MANUAL.

Notes on Manual Tracking Adjustment
- When manual tracking adjustment does not give a satisfactory result, press both "TRACKING NORMAL/SLOW(STILL ADJUST) ▼ and ▲". The tracking returns to the center position.
- Tracking adjustment may not be possible when the recording condition of the tape is very poor.

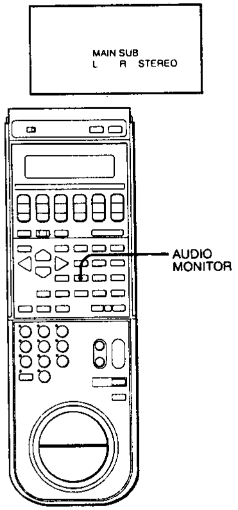

DATA
SCREEN


Approximate amount of tape left
S
E
Beginning of the tape
End of the tape
S
E
0 08 36
Linear time counter
SP
Tape speed
Tape operation mode

■ **Data Screen**
The following information (data screen) appears on the TV screen.

To turn off the data screen display, press DATA SCREEN.

Notes on the remaining tape length indicator:
- The remaining tape length indication only shows the approximate amount of tape left.
- The indication may shift vertically in the picture search mode.
- The remaining tape length indicator may not show a proper index when a short tape, such as an E-30 or VHS-C cassette, or when a non-standard tape is used.


MAIN SUB
L R STEREO
AUDIO
MONITOR

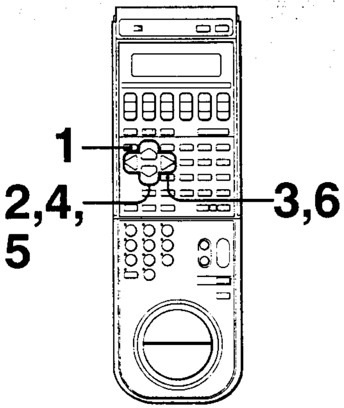
Listening to a Stereo or Bilingual Tape

Use the AUDIO MONITOR button on the Remote Commander.

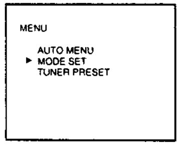
Press AUDIO MONITOR to select the sound to be heard.
With each press, you can select stereo (left and right channel sounds), left-channel sound, right-channel sound or the sound on the normal audio track.
The selected sound is indicated in the display window of the VTR.

Display	Sound to be heard	
	Stereo tape	Bilingual tape
STEREO	Stereo	Left and right channels
MAIN/L	Left channel	Left channel
SUB/R	Right channel	Right channel
None	Monaural (on normal audio track)	Sound on normal audio track

The AUDIO MONITOR button does not work in the following cases
- With a monaural tape
  (The tape which has no recording on its Hi-Fi track)
- When AUDIO MIX ON is selected in the MODE SET menu (see page 21.)



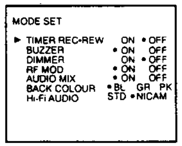
2



```
MENU

  AUTO MENU
▶ MODE SET
  TUNER PRESET
```

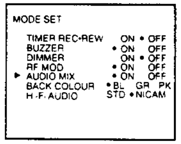
3



```
MODE SET

▶ TIMER REC-REW     ON  • OFF
  BUZZER          • ON    OFF
  DIMMER            ON  • OFF
  RF MOD          • ON    OFF
  AUDIO MIX       • ON    OFF
  BACK COLOUR     • BL   GR   PK
  Hi-Fi AUDIO      STD  • NICAM
```

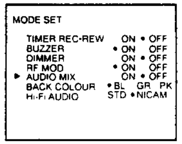
4



```
MODE SET

  TIMER REC-REW     ON  • OFF
  BUZZER          • ON    OFF
  DIMMER            ON  • OFF
  RF MOD          • ON    OFF
▶ AUDIO MIX       • ON    OFF
  BACK COLOUR     • BL   GR   PK
  Hi-Fi AUDIO      STD  • NICAM
```

5



```
MODE SET

  TIMER REC-REW     ON  • OFF
  BUZZER          • ON    OFF
  DIMMER            ON  • OFF
  RF MOD          • ON    OFF
▶ AUDIO MIX         ON  • OFF
  BACK COLOUR     • BL   GR   PK
  Hi-Fi AUDIO      STD  • NICAM
```

Listening to Mixed Sounds on the Hi-Fi Audio Track and Normal Audio Track

You can hear the sounds recorded on the Hi-Fi audio track and the normal audio track at the same time. This function is useful when you listen to an audio-inserted tape.

1 **Press MENU in the stop mode.**
The main MENU appears.

2 **Move the cursor with ▲ or ▼ to MODE SET.**

3 **Press EXECUTE.**
The MODE SET menu appears.

4 **Move the cursor with ▲ or ▼ to AUDIO MIX.**

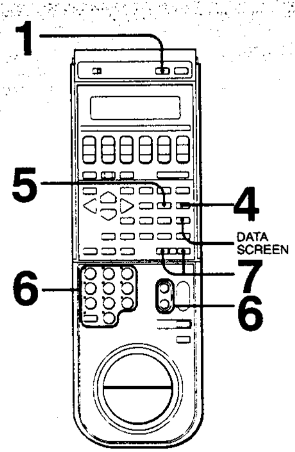
5 **Select ON or OFF with ◀ or ▶.**

ON: to deactivate AUDIO MONITOR so that the sounds of the Hi-Fi audio and normal audio tracks are always output.

OFF: to activate AUDIO MONITOR so that you can select the sound to be heard.

6 **Press EXECUTE to store the setting and return to the original screen.**

Note:
Reset the AUDIO MIX setting to OFF after listening to the particular tape.



Recording TV Programmes

This section shows you how to record TV programmes. You can also watch a TV programme on the TV screen while recording another.
Before recording, check to see that all the connections have been made correctly.

1 **Press TV/VTR to light up the VTR indication in the display window on the VTR.**

2 **Turn on the TV.**
If you have made the VTR-TV connection via the aerial socket, select the programme position for the VTR on the TV.

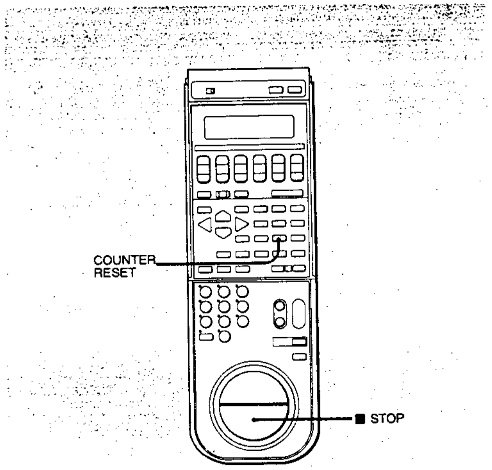
3 **Insert a cassette with a safety tab into the compartment.**
The VTR turns on.

4 **Press INPUT SELECT so that the TUNER indicator lights up in the display window.**

5 **Press REC MODE to select the recording tape speed, SP or LP.**

6 **Press PROG +/− (PROGRAM +/−) or programme position number buttons to select the programme position you want to record.**
For example, if you want to select 26, press -/-- button and then 2 and 6.

7 **Press the right button while holding down ● REC.**
When you control from the VTR, press ● REC only
Recording begins.
The information (data screen) appears on the TV screen. The data screen is not recorded on the tape. To turn off the data screen display, press DATA SCREEN.
When the tape reaches the end, the VTR rewinds the tape automatically to the beginning.



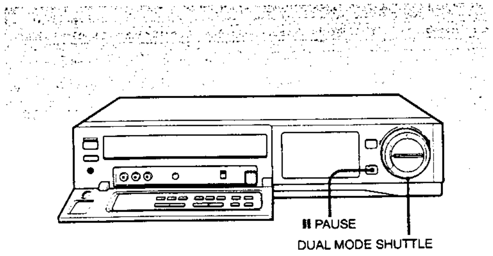
To stop recording
Press ■ STOP.

About the LP and the SP modes
In the LP mode, you can record twice as long as in the SP mode. However, the quality of the playback picture in the LP mode will not be as good as that in the SP mode.

■ Resetting the Tape Counter

You can use the tape counter as a reference to locate a desired scene after recording is completed.

Press COUNTER RESET on the Remote Commander to reset the counter to "0H00M00S" (counter zero position) before you start to record. After recording is completed, rewind the tape to the counter zero position.
When you re-insert the cassette, the counter set to "0H00M00S" automatically.



Cutting Out an Unwanted Scene

While recording

1 **Press II PAUSE when an unwanted scene appears on the screen.**
Recording stops.

2 **Press II PAUSE again to resume recording at the desired point.**

By recording over it

1 **Press II PAUSE during recording.**
Recording stops.

2 **Turn the DUAL MODE SHUTTLE ring to locate the point where you want to continue recording.**

3 **Release the DUAL MODE SHUTTLE ring at the desired point.**

4 **Press II PAUSE again to resume recording.**

Watching a TV Programme While Recording

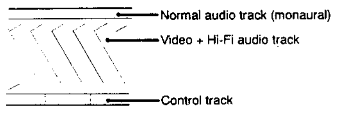
If you have made the VTR-TV connection via the EURO-AV connector

1 **Press TV/VTR to turn off the VTR indicator.**

2 **Select a programme position on the TV.**
The picture of that programme appears on the TV screen.

If you have made the VTR-TV connection via the aerial sockets
Change the programme position on the TV.

Hi-Fi recording pattern on a tape



Recording Stereo/Bilingual Programmes – For the SLV-625/625NC/625VP

The SLV-625/625NC/625VP receives and records stereo/bilingual programmes based on the "Zweiton system" adopted in Germany (former West Germany). Recording of the Zweiton system programmes is automatically done. When you hear the recorded sound, select the desired sound with the AUDIO MONITOR button on the Remote Commander.

■ Hi-Fi recording pattern on a tape

A stereo or bilingual programme will be recorded on the Hi-Fi audio track and normal audio track as shown on the left.

■ Where the sound is recorded

Stereo programme

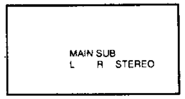
- The sound is recorded as follows:

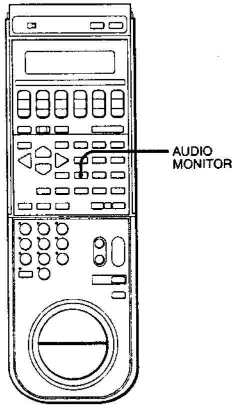
Left channel: on the left channel of the Hi-Fi Audio track
Right channel: on the right channel of the Hi-Fi Audio track
Mixed sound of the left and the right channels (Monaural) on the normal audio track

Bilingual programme

- The sound is recorded as follows:

Main: on the left channel of the Hi-Fi audio track and on the normal audio track
Sub: on the right channel of the Hi-Fi audio track





■ To select the sound you hear

Use the AUDIO MONITOR button on the Remote Commander.

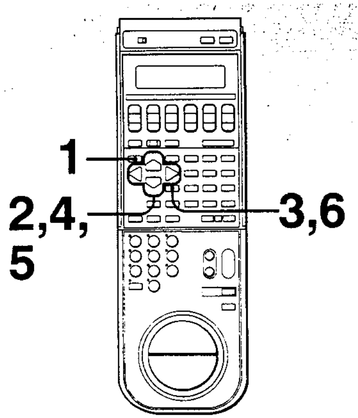
Stereo programme

When the VTR receives a stereo programme, "STEREO" appears in the display window.
The AUDIO MONITOR button does not function for the stereo programmes of the Zweiton system.

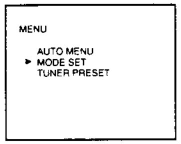
Bilingual programme

When the VTR receives a bilingual programme, MAIN/L appears in the display window.
Press the AUDIO MONITOR button repeatedly until the desired sound is heard. You can select the sound cyclically in the order as follows.

In the display window	Sound to be heard
MAIN/L	Main sound
SUB/R	Sub sound
MAIN/L **SUB/R**	Main sound on the left channel and sub sound on the right channel



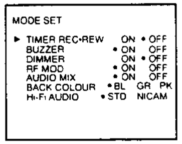
2



```
MENU

  AUTO MENU
▶ MODE SET
  TUNER PRESET
```

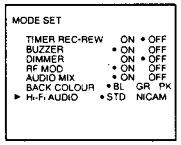
3



```
MODE SET

▶ TIMER REC•REW    ON • OFF
  BUZZER         • ON   OFF
  DIMMER           ON • OFF
  RF MOD         • ON   OFF
  AUDIO MIX      • ON   OFF
  BACK COLOUR   • BL  GR  PK
  Hi-Fi AUDIO   • STD  NICAM
```

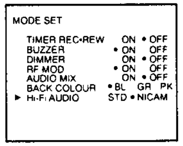
4



```
MODE SET

  TIMER REC•REW    ON • OFF
  BUZZER         • ON   OFF
  DIMMER           ON • OFF
  RF MOD         • ON   OFF
  AUDIO MIX      • ON   OFF
  BACK COLOUR   • BL  GR  PK
▶ Hi-Fi AUDIO   • STD  NICAM
```

5



```
MODE SET

  TIMER REC•REW    ON • OFF
  BUZZER         • ON   OFF
  DIMMER           ON • OFF
  RF MOD         • ON   OFF
  AUDIO MIX        ON • OFF
  BACK COLOUR   • BL  GR  PK
▶ Hi-Fi AUDIO     STD • NICAM
```

Recording Stereo/Bilingual Programmes – For the SLV-625UB/625NC

The SLV-625UB/625NC receives and records stereo/bilingual programmes based on the "NICAM" system adopted in the United Kingdom and Nordic countries. NICAM broadcasting has two-channel digital sounds called NICAM L and R channels in addition to the standard sound. The NICAM L and R are assigned to the stereo left and right channels or the main and sub sounds of a bilingual programme. The standard sound of most NICAM broadcasts is the mixed sound of the left and right channels for a stereo programme, and the main sound for a bilingual programme.

To receive and record the NICAM broadcast, you have to select "Hi-Fi AUDIO NICAM" on the MODE SET menu.

■ To record NICAM broadcast

1 **Before recording a NICAM broadcast, press MENU.**
The main MENU appears.

2 **Press ▲ or ▼ to move the cursor (▶) to MODE SET.**

3 **Press EXECUTE.**

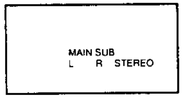
4 **Press ▲ or ▼ to move the cursor (▶) to Hi-Fi AUDIO.**

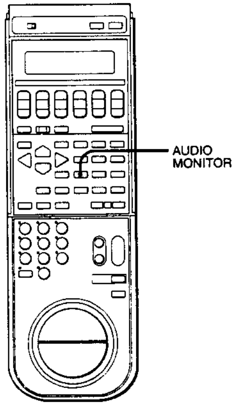
5 **Press ▶ to move the dot (●) to NICAM.**
If you select "STD", the standard sound will be recorded on the left and right channels of the Hi-Fi audio track and the normal audio track.

6 **Press EXECUTE to store the setting.**

With the NICAM setting, NICAM broadcasts will be recorded as in the following table.

Track	Sound to be recorded	
	Stereo	Bilingual
Hi-Fi Audio Left channel	Left channel	Main
Hi-Fi Audio Right channel	Right channel	Sub
Normal audio	Standard	Standard





■ To select the sound you hear

Stereo programme
When the VTR receives a stereo programme, "STEREO" and "NICAM" appear in the display window.
Press the AUDIO MONITOR button to select the sound to be heard. Each time you press the AUDIO MONITOR button, the STEREO (NICAM L and R channels) or the standard sound is selected alternately.

In the display	Sound to be heard
STEREO	Left channel sound on the left channel and right channel sound on the right channel
Blank	Standard sound

Bilingual programme
When the VTR receives a bilingual programme, "NICAM" and "MAIN/L" appear in the display window. Press the AUDIO MONITOR button repeatedly until you can hear the desired sound. The sound is selected cyclically in the order as follows:

In the display	Sound to be heard
MAIN/L	Main sound
SUB/R	Sub sound
MAIN/L **SUB/R**	Main sound on the left channel and Sub sound on the right channel
Blank	Standard sound

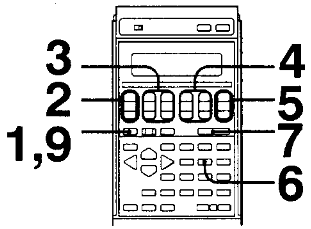
Timer-Activated Recording

You can preset up to eight programmes for timer-activated recording within one month (between today and one day before the same day in the next month). This section shows you how to preset, on the timer of the VTR, the recording turn-on and turn-off time for the TV programmes to be recorded. You can also check and change the timer settings if you want.

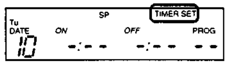
■ **Before you begin**
Set the timer using the buttons on the Remote Commander while referring to the indications on its LCD.

To assure your programming, check the following points.

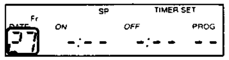
- See that the clocks on the Remote Commander and the VTR show the current time.
- See that a cassette with safety tab has been inserted.
- For SLV-625VP users: read "Using the Video Programme System (VPS Function)" on page 50.



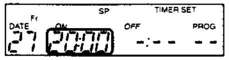
1


TIMER SET
SP
Tu
DATE
ON
OFF
PROG
10

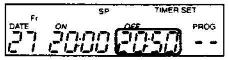
2


SP
TIMER SET
Fr
ON
OFF
PROG
27

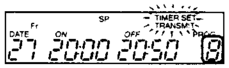
3


SP
TIMER SET
Fr
DATE
OFF
PROG
27
20:00

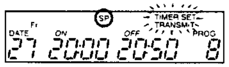
4


SP
TIMER SET
Fr
DATE
ON
PROG
27
20:00
20:50

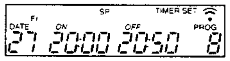
5


SP
TIMER SET
TRANSMIT
Fr
DATE
ON
OFF
27
20:00
20:50
8

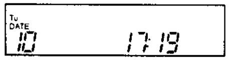
6


SP
TIMER SET
TRANSMIT
Fr
DATE
ON
OFF
PROG
27
20:00
20:50
8

7


SP
TIMER SET
Fr
DATE
ON
OFF
PROG
27
20:00
20:50
8

9


Tu
DATE
10
17:19

Setting the Timer

■ **Example:** To record a TV programme from 20:00 to 20:50 on Friday, 27th November, 1992, on programme position 8.

1 **Press TIMER SET.**

2 **Press the D (DAY) button until 27 appears.**
The day of the week, Fr (Friday) is adjusted automatically.

3 **Press the H (Hour) button and then the M (Minute) button in the TURN ON section to set the recording start time.**

4 **Press the H (Hour) button and then the M (Minute) button in the TURN OFF section to set the recording end time.**

5 **Press PROG + / − to select the desired programme position to be recorded.**

6 **Press REC MODE to select the recording tape speed, SP or LP** (see "About the LP and the SP modes" on page 32).
The TRANSMIT indicator flashes to indicate that all of the items have been entered.

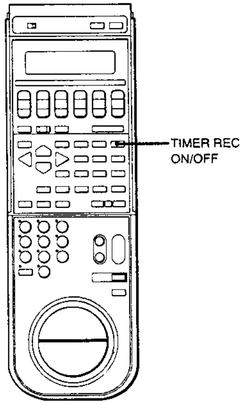
7 **Point the Remote Commander at the VTR and press TRANSMIT.**
When a beep tone sounds, the VTR is ready for timer-activated recording.
The PROGRAM LIST appears on the TV screen for a few seconds.

8 **To set other programmes, repeat steps 2 to 7.**

9 **Press TIMER SET.**
The current time appears on the LCD display.

The VTR turns on, starts recording at the preset time, and goes off after recording.

Timer-Activated Recording



Note:
You can transmit data for timer-activated recording to the VTR even if the VTR is off or if the VTR is ready for timer-activated recording.

To stop the timer-activated recording
Press TIMER REC ON/OFF.

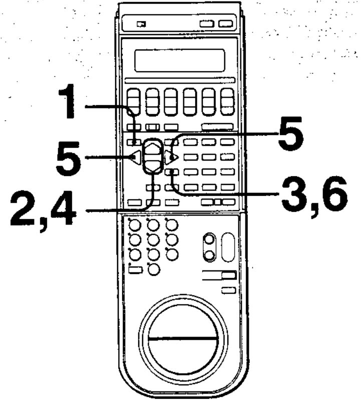
- **To use the VTR before timer-activated recording starts**
  Press TIMER REC ON/OFF, then turn on the power of the VTR. After using the VTR, remember to press TIMER REC ON/OFF again.

If a short beep tone sounds repeatedly when you press TRANSMIT
When the BUZZER is set to ON in the MODE SET menu, a short beep sounds when the VTR fails to receive the command transmitted from the Remote Commander. Press TRANSMIT repeatedly, and if the beep sounds persists, check the following:

- No cassette is inserted.
- You have made an illogical operation on the Remote Commander.
- You have attempted to transmit data when the VTR is in the timer recording mode.
- You have already made eight timer settings.
- The tape is at its end.

If the power is interrupted while in the timer recording standby/timer recording mode for more than one hour
In the recording standby mode, timer settings are cleared. Reset the settings from the beginning.
In the timer recording mode, the recording stops and the VTR turns off.
If the power interruption lasts for less than one hour, the VTR returns to the original mode when the power is supplied again.

Timer-Activated Recording



■ **Warning buzzer**
You can activate or deactivate the beep tone that the VTR gives to warn that you have made an illogical setting for the timer-activated recording.

1 Press MENU.
The main MENU appears on the TV screen.

2 Press ▲ or ▼ to move the cursor (▶) to MODE SET.

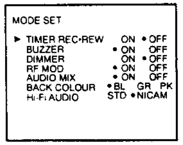
3 Press EXECUTE.
The MODE SET menu appears on the TV screen.

4 Press ▲ or ▼ to move the cursor (▶) to BUZZER.

5 Press ◀ or ▶ to move the dot (●) to ON or OFF.
ON: Warning buzzer sounds.
OFF: Warning buzzer does not sound.

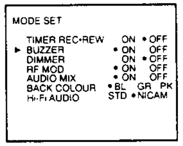
6 Press EXECUTE.
The setting is stored and the VTR returns to the original TV screen.

3

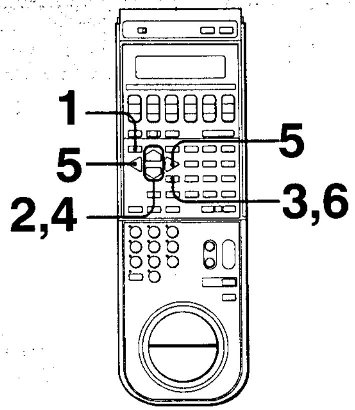

```
MODE SET

▶ TIMER REC•REW    ON  ●OFF
  BUZZER          ●ON   OFF
  DIMMER           ON  ●OFF
  RF MOD          ●ON   OFF
  AUDIO MIX       ●ON   OFF
  BACK COLOUR    ●BL   GR  PK
  Hi-Fi AUDIO    STD ●NICAM
```

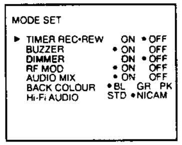
4


```
MODE SET

  TIMER REC•REW    ON  ●OFF
▶ BUZZER          ●ON   OFF
  DIMMER           ON  ●OFF
  RF MOD          ●ON   OFF
  AUDIO MIX       ●ON   OFF
  BACK COLOUR    ●BL   GR  PK
  Hi-Fi AUDIO    STD ●NICAM
```



4


```
MODE SET

▶ TIMER REC•REW    ON  ●OFF
  BUZZER          ●ON   OFF
  DIMMER           ON  ●OFF
  RF MOD          ●ON   OFF
  AUDIO MIX       ●ON   OFF
  BACK COLOUR    ●BL   GR  PK
  Hi-Fi AUDIO    STD ●NICAM
```

■ **Rewinding the Tape Automatically after Recording**
Use the TIMER REC-REW function of the MODE SET menu as shown below.

1 Press MENU.
The main MENU appears on the TV screen.

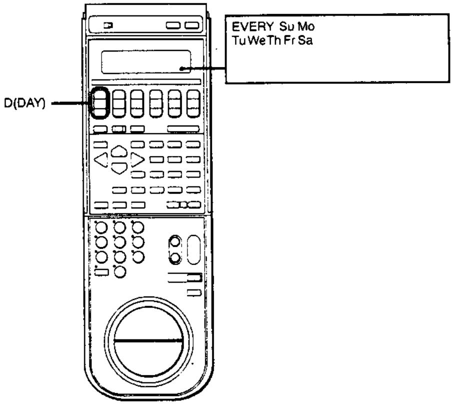
2 Press ▲ or ▼ to move the cursor (▶) to MODE SET.

3 Press EXECUTE.
The MODE SET menu appears on the TV screen.

4 Press ▲ or ▼ to move the cursor (▶) to TIMER REC-REW.

5 Press ◀ or ▶ to move the dot (●) to ON.

6 Press EXECUTE.
The setting is stored and the VTR returns to the original TV screen.



■ **Daily/Weekly Recording**

You can preset the timer-activated recording to record the same programme every day of the week (daily recording), or one day of every week (weekly recording).

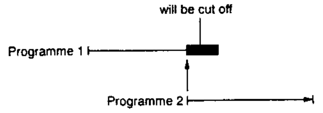
Press the D (DAY) button until the desired daily/weekly programme appears in step 2 of "Setting the Timer" on page 39.

Each time you press the – (minus) side of the D (DAY) button, the indication in the LCD display changes.

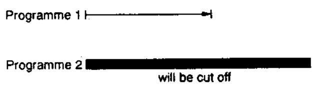
Day setting	LCD display
Every day	EVERY SuMo TuWeThFrSa
:	:
Every day except Sunday	EVERY Mo TuWeThFrSa
:	:
Every day except Saturday and Sunday	EVERY Mo TuWeThFr
:	:
Every Saturday	EVERY Sa
:	:
Every Friday	EVERY Fr
:	:
↓	↓
Every Sunday	EVERY Su

When the desired daily/weekly recording programme is set and transmitted to the VTR, the corresponding indicator appears in the display window.

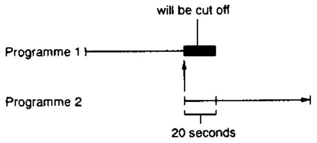
(a)



(b)



(c)



■ **When the Timer Settings Overlap**

(a) **If the setting of two programmes overlap**
Recording of the next programme begins automatically before the preceding programme ends.

(b) **If the recording start time of the two programmes are the same**
The VTR records the programme with the smaller programme number or listed first on the programme list. The programme with the larger programme number or the number listed lower in the list is deleted.

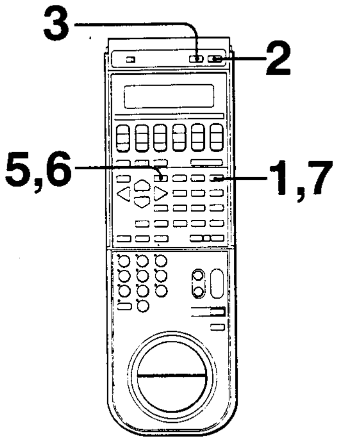
(c) **If the recording end time of programme 1 and the recording start time of the programme 2 are the same**
The last 20 seconds of programme 1 will not be recorded because the VTR prepares for recording programme 2 before programme 1 ends.

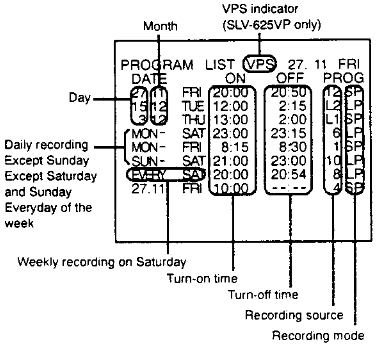
■ **Recording from Other Sources**

You can record programmes from equipment (such as an FM tuner, satellite tuner, etc.) connected to the EURO-AV connector or LINE IN 2 VIDEO/AUDIO jacks.

Press INPUT SELECT any time during steps 1 to 7 of "Setting the Timer" to change the indication "PROG - -" to "LINE L1 or "LINE L2".

- **LINE L1:** To record from equipment connected to the EURO-AV connector
- **LINE L2:** To record from equipment connected to the LINE IN 2 VIDEO/AUDIO jacks




```
PROGRAM  LIST  VPS  27. 11  FRI
  DATE          ON     OFF   PROG
  27 11  FRI  20:00   20:50  12 SP
  15 12  TUE  12:00    2:15  L2 LP
   3 12  THU  13:00    2:00  L1 SP
  MON-   SAT  23:00   23:15   6 LP
  MON-   FRI   8:15    8:30   1 SP
  SUN-   SAT  21:00   23:00  10 LP
  EVERY  SAT  20:00   20:54   8 LP
  27.11  FRI  10:00   --:--   4 SP
```
VPS indicator
(SLV-625VP only)
Month
Day
Daily recording
• Except Sunday
• Except Saturday and Sunday
• Everyday of the week
Weekly recording on Saturday
Turn-on time
Turn-off time
Recording source
Recording mode

Checking the Timer Settings

You can check the current timer settings, while in the timer standby mode, by displaying the programme list on the TV screen.

1 **Press TIMER REC ON/OFF to turn off the TIMER indicator in the display window of the VTR.**

2 **Turn on the VTR.**

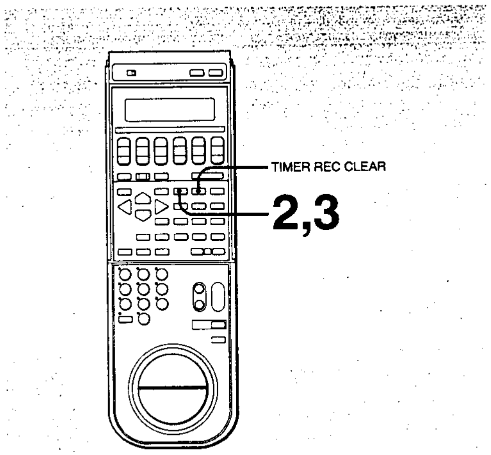
3 **Press TV/VTR so that the VTR indicator lights up in the display window.**

4 **Turn on the TV.**
If you have made the VTR-TV connection via the aerial socket, select the programme position for the VTR on the TV.

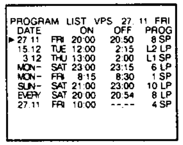
5 **Press TIMER ON SCREEN.**
The programme list appears on the TV screen.

6 **After you have checked the settings press TIMER ON SCREEN again.**
The original TV screen appears.

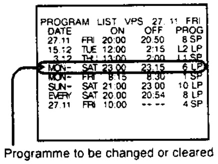
7 **Press TIMER REC ON/OFF.**
The VTR returns to timer-activated recording standby.


TIMER REC CLEAR
2,3

2


```
PROGRAM  LIST  VPS  27. 11  FRI
  DATE          ON     OFF   PROG
▶ 27 11  FRI  20:00   20:50   8 SP
  15.12  TUE  12:00    2:15  L2 LP
   3 12  THU  13:00    2:00  L1 SP
  MON-   SAT  23:00   23:15   6 LP
  MON-   FRI   8:15    8:30   1 SP
  SUN-   SAT  21:00   23:00  10 LP
  EVERY  SAT  20:00   20:54   8 LP
  27.11  FRI  10:00   --:--   4 SP
```

3


```
PROGRAM  LIST  VPS  27. 11  FRI
  DATE          ON     OFF   PROG
  27.11  FRI  20:00   20.50   8 SP
  15.12  TUE  12:00    2:15  L2 LP
   3.12  THU  13:00    2:00  L1 SP
▶ MON-   SAT  23:00   23:15   6 LP
  MON-   FRI   8:15    8:30   1 SP
  SUN-   SAT  21:00   23:00  10 LP
  EVERY  SAT  20.00   20:54   8 LP
  27.11  FRI  10:00   --:--   4 SP
```
Programme to be changed or cleared

Changing or clearing the Timer Settings

First, display the programme list on the TV screen and change or clear the programme using the Remote Commander.

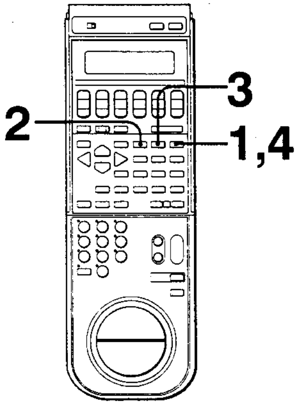
1 **Display the programme list on your TV screen.**
See the "Checking the Timer Settings" on page 46.

2 **Press TIMER REC CHECK to display the cursor (▶).**

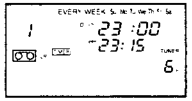
3 **Press TIMER REC CHECK to move the cursor (▶) to the setting you want to change or clear.**

4 **To change the setting,**
Re-enter all the items and transmit it to the VTR. (See "Setting the Timer" on page 39.) The VTR is automatically ready for the timer-activated recording.
To clear the setting,
Press TIMER REC CLEAR.

Timer-Activated Recording



2



- **Clearing the Setting without Using the Programme List**

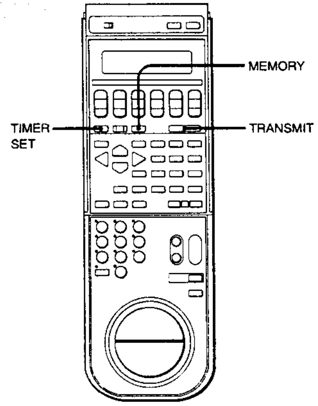
You can erase the setting you do not want while referring to the display window on the VTR.

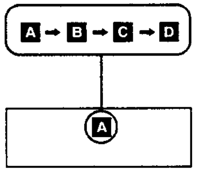
1 **Press TIMER REC ON/OFF.**

2 **Press TIMER REC CHECK repeatedly until the programme you want to clear appears in the display window.**

3 **Press TIMER REC CLEAR.**
The timer setting of the selected programme is cleared.

4 **Press TIMER REC ON/OFF to return to timer recording standby mode if there are other programmes set for timer recording.**





Storing the Timer Settings

Once programmes have been recorded, you need to set the timer again except for daily/weekly recording. However, if you store the timer settings into the Remote Commander's memory, you can recall the timer settings whenever you want. You can store up to four settings into the Remote Commander's memory. Each setting is stored into one of four positions (A, B, C and D). Moreover, the recording date shifts automatically to the next week after the recording is completed. Thus, you can quickly access the most frequently used settings, especially your favorite weekly programme.

- **Storing the settings**

1 **Press TIMER SET.**

2 **Press MEMORY so that MEMORY A in the LCD panel of the Remote Commander appears.**

3 **Set all items for timer-activated recording.**
(See "Setting the Timer" on page 39.)

4 **Press MEMORY to change the indication to B, C, or D, and repeat step 3 for other settings.**
The settings are kept in memory even if you press TIMER SET.

- **Recalling and re-entering the settings**

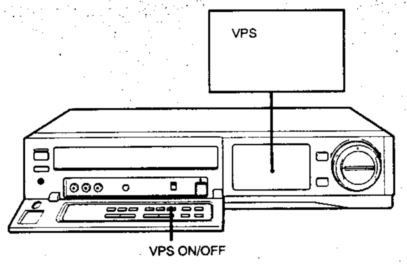
1 **Press TIMER SET.**

2 **Press MEMORY to call up the desired memory indication (A, B, C or D).**

3 **Make whatever changes you want.**

4 **Press TRANSMIT.**
The VTR enters timer-activated recording standby mode.

Timer-Activated Recording



Using the Video Programme System (VPS) Function (For the SLV-625VP only)

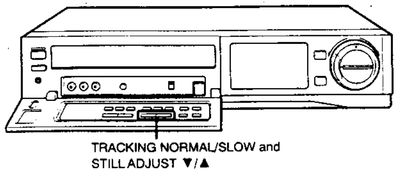
The German broadcasting system transmits VPS signals with TV programmes. This assures timer recordings without missing any portion of the programme, regardless of being broadcast early, of any time delay, extension, or of broadcast interruption which might occur during the programme. Before recording with the VPS function, make sure that the VPS signal is transmitted with the programme you want to record.

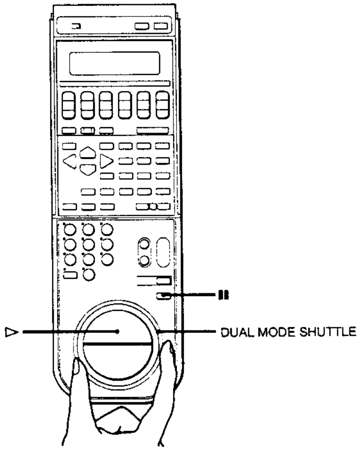
1 **Press VPS ON/OFF so that the VPS appears in the display window.**

2 **Set the timer referring to "Timer-Activated Recording" on page 39.**

Notes:
- When the VTR is on standby for a VPS programme, programme position numbers set for timer-activated recording appear sequentially in the display window at intervals of several seconds.
- The VTR is ready for VPS recording well before the turn-on time (ON/STANDBY indicator displays) and remains on standby until the VPS signal is received so as to be ready for any change in the broadcast time.
- The VPS button is effective only when the TIMER REC does not appear in the display window.
- If the VTR cannot receive the VPS signal because it is too weak or because the station failed to use it to transmit, it records the programme without the VPS function regardless of the VPS indication in the display window.
- The recording stops when the VTR receives a VPS programme interruption code during recording, for example, when an urgent news bulletin is inserted. As soon as the interrupted programme resumes, recording continues.

Variable Speed Playback - DUAL MODE SHUTTLE



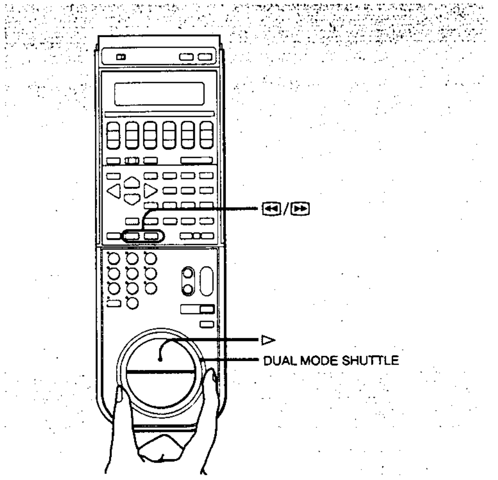


■ **Still picture**

During playback, press II PAUSE.
To resume normal playback, press ▷ PLAY or II PAUSE.
When the pause mode lasts for more than approximately 5 minutes, the VTR returns to playback automatically.

Notes:
- **If a noise band appears on the top or bottom of the TV screen while in the still mode**
  Change to the slow-motion play mode with the DUAL MODE SHUTTLE and adjust the picture with TRACKING NORMAL/SLOW and STILL ADJUST ▼/▲.
- **If the picture shakes while in the still mode**
  Adjust the picture with TRACKING NORMAL/SLOW and STILL ADJUST ▼/▲.

Variable Speed Playback – DUAL MODE SHUTTLE



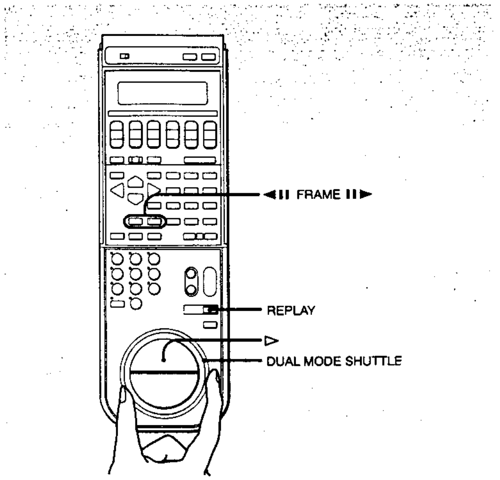
■ **Picture search**
During playback, turn the DUAL MODE SHUTTLE ring clockwise (forward direction) or counterclockwise (reverse direction) until "[▶▶]" or "[◀◀] " appears on the TV screen. Hold the ring at that position. While holding it, a high speed picture without sound appears on the TV screen. To resume normal playback, release the ring.

Note:
Noise may occur and the colour may normally not be reproduced during picture search when you play back tapes recorded in LP recording speed depending on the TV connected to the VTR.

■ **Locked picture search**
During playback, press ⏪ SEARCH (reverse direction) or ⏩ SEARCH (forward direction).
A high-speed picture appears on the TV screen even when you release the button. To resume normal playback, press ▷ PLAY.

■ **Slow-motion playback**
During playback or in the still mode, turn the DUAL MODE SHUTTLE ring clockwise (forward direction) or counterclockwise (reverse direction) so that "I▶" or ◀I appears in the display window. Hold the ring at that position. While holding it, a slow-motion picture appears on the TV screen. To resume the previous status (playback or still mode) release the ring.

Note:
If streaks or snow appear during forward slow-motion playback
Adjust the picture with TRACKING NORMAL/SLOW and STILL ADJUST ▼/▲ on the VTR.

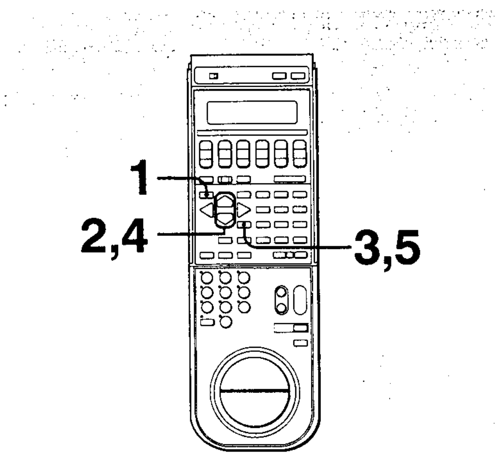


■ **Viewing the picture momentarily during fast-forward or rewind**
Turn the DUAL MODE SHUTTLE ring clockwise (forward direction) or counterclockwise (reverse direction) during fast-forward or rewind.
You can view a picture at high speed while you hold the ring at that position. When you release the ring, the VTR returns to the previous status (fast-forward or rewind).

■ **Frame-by-Frame picture**
In the still mode, press ◀ II FRAME to reverse the picture one frame.
Press II ▶ FRAME to advance the picture one frame. To resume normal playback, press ▷ PLAY.

■ **Replay**
During playback, press REPLAY.
The VTR replays in slow-motion the last two seconds of the scene just played.

Assigning a Desired Operation – AUTO MENU



You can get the VTR to perform certain functions in sequence automatically. The AUTO MENU guides you to your desired sequential operations.

1 **Press MENU.**
The main MENU appears on the TV screen.

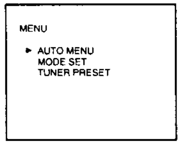
2 **Press ▲ or ▼ to move the cursor (▶) to AUTO MENU.**

3 **Press EXECUTE.**
The AUTO MENU appears on the TV screen.

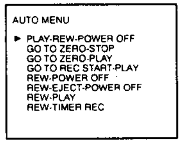
4 **Press ▲ or ▼ to move the cursor (▶) to the desired item.**

5 **Press EXECUTE.**
The item you selected is activated.

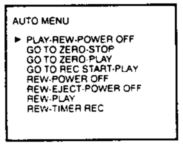
2


MENU
▶ AUTO MENU
MODE SET
TUNER PRESET

3


AUTO MENU
▶ PLAY-REW-POWER OFF
GO TO ZERO-STOP
GO TO ZERO-PLAY
GO TO REC START-PLAY
REW-POWER OFF
REW-EJECT-POWER OFF
REW-PLAY
REW-TIMER REC

(PLAY-REW-POWER OFF is selected.)


AUTO MENU
▶ PLAY-REW-POWER OFF
GO TO ZERO-STOP
GO TO ZERO-PLAY
GO TO REC START-PLAY
REW-POWER OFF
REW-EJECT-POWER OFF
REW-PLAY
REW-TIMER REC

(PLAY-REW-POWER OFF is selected.)

■ What you can do with the AUTO MENU

The functions included in the AUTO MENU are as follows:

PLAY-REW-POWER OFF
Plays back the tape, rewinds the tape when it reaches the end, and turns the power off.

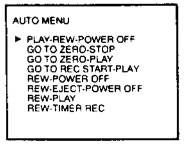
GO TO ZERO-STOP
Searches for the counter zero point and stops.

GO TO ZERO-PLAY
Searches for the counter zero point and starts playback.

GO TO REC START-PLAY
Searches for the recording start point and starts playback.

Notes:
You cannot assign GO TO REC START-PLAY if the recording start point data has been erased by:
- Pressing COUNTER RESET
- Ejecting and re-inserting the cassette
- Pressing ◀◀◀ HI-SPEED REWIND

Assigning a Desired Operation – AUTO MENU



(PLAY-REW-POWER OFF is selected.)

REW-POWER OFF
Rewinds the tape to the beginning and turns the power off.

REW-EJECT-POWER OFF
Rewinds the tape to the beginning,ejects the tape and turns the power off.

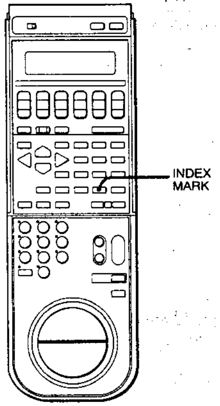
REW-PLAY
Rewinds the tape to the beginning and starts playback.

REW-TIMER REC
Rewinds the tape to the beginning and enters the timer-activated recording standby mode when the timer is preset. If you insert a cassette without a safety tab, the VTR will eject the cassette.

Note:
To call up desired AUTO MENU after the VTR enters timer-recording standby, first press TIMER REC ON/OFF to cancel the standby, then press ⏻ (ON/STANDBY) to turn on the VTR.

When you cannot activate the AUTO MENU function
A short beep tone alerts you.
Check that a cassette has been inserted in the compartment or that the VTR is in the stop mode.

Indexing

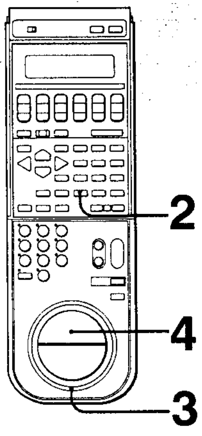


Assigning Index Marks

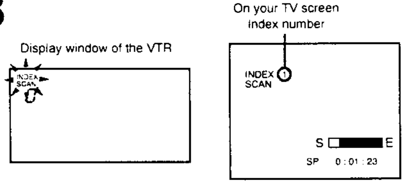
You can easily locate the desired portion on the tape you want to play, by marking index signals on the tape. You have two methods to mark the index signals on the tape.

- **Automatic index marking**
  An index signal is automatically marked on the tape every time the VTR starts recording.
- **Manual index marking**
  During recording or normal playback, press INDEX MARK to mark an index. While an index signal is being marked, the INDEX indicator flashes in the display window of the VTR and the INDEX MARK display appears on the TV screen.

Notes:
- Leave an interval of more than 2 minutes between index marks.
- While marking an index signal, you cannot hear the recorded sound.
- You cannot mark index signals when using a cassette without a safety tab.
- You cannot mark index signals on an unrecorded portion of a tape.



3


Display window of the VTR
INDEX
SCAN
0
On your TV screen
index number
INDEX 1
SCAN
S E
SP 0:01:23

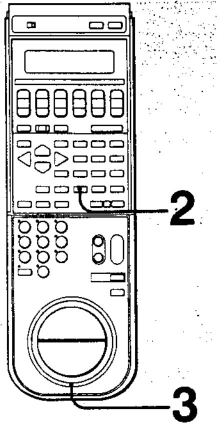
Playing Back from the Index Mark – INDEX SCAN

1 **Insert a cassette with index signals marked on it.**

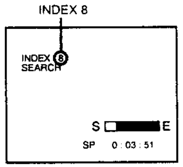
2 **Press INDEX once.**
The INDEX and SCAN indicators flash alternately and 0 (zero) shows in the display window of the VTR.

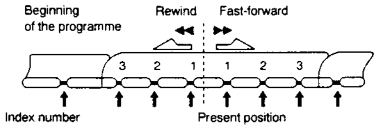
3 **Turn the DUAL MODE SHUTTLE ring counterclockwise to locate the previous programme or clockwise to locate the programme ahead.**
The VTR goes to the previous or next index signal. The VTR plays the tape for approximately 10 seconds and then moves to the next index in the selected direction. The index number changes one by one.

4 **Press ▷ PLAY when you locate the desired index signal.**



2


INDEX 8
INDEX 8
SEARCH
S E
SP 0:03:51


Beginning of the programme
Rewind
Fast-forward
3
2
1
1
2
3
Index number
Present position

Locating an Index Mark – INDEX SEARCH

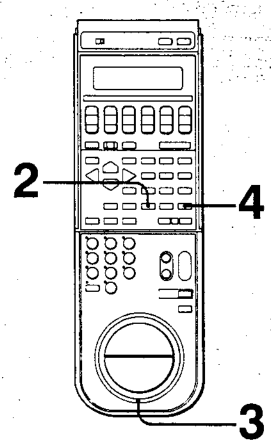
You can find an index point where you want to start playback, by entering a specific number.
For example: INDEX 8 is the number of the index signal marked on the scene you want to view.

1 **Insert a cassette with index signals marked on it.**

2 **Press INDEX repeatedly until the index mark number from which you want to start playback appears in the display window of the VTR or on the TV screen.**

You can find up to 19 index marks behind or ahead of the present position. (See the diagram on the left.)

3 **Turn the DUAL MODE SHUTTLE ring counterclockwise if the desired point is behind, or clockwise if the desired point is ahead of the current tape position.**
The VTR starts searching and the index number is counted down to zero. Playback starts from the desired point.



Erasing an Index Mark

You can erase the index signal marked on the tape.

1 **Insert a cassette with index signals marked on it.**

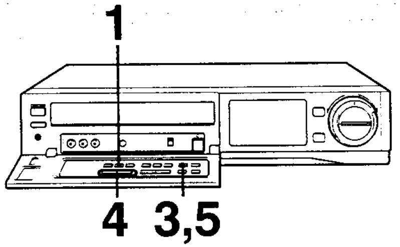
2 **Press INDEX once.**
"INDEX 0" appears on the TV screen.

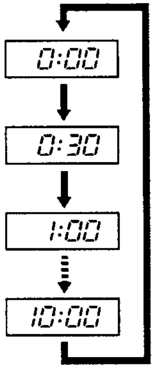
3 **Turn the DUAL MODE SHUTTLE ring clockwise or counterclockwise.**
When the VTR detects an index mark, the VTR plays the tape for approximately 10 seconds from the index mark. If that is not the index mark you want to erase, wait until the index mark to be erased is located.

4 **Press INDEX ERASE while the VTR plays the picture.**
That index is erased.

Notes:
- Although you cannot hear the recorded sound while the index mark is being erased, the recorded sound is retained.
- If you do not press INDEX ERASE within 10 seconds of playback, the VTR goes on to find other index marks.

Quick-Timer Recording





You can set the recording time instantly. Using this quick timer, you can preset the recording duration in units of 30 minutes, and you can record a programme up to 10 hours. For example, if you have to leave home during recording, use this function so that you will be able to turn off the VTR after the programme is over.
If the VTR is already recording, skip steps 1 to 4.

1 **Press INPUT SELECT so that the TUNER indication lights up in the display window.**

2 **Insert a cassette with a safety tab.**

3 **Press QUICK TIMER.**
The TIMER indication lights up in the display window.

4 **Press PROGRAM +/− to select the programme position to be recorded while 0:00 and the programme position number are flashing in the display window.**

5 **Press QUICK TIMER again within 30 seconds to start recording.**
Each press increases the recording time by units of 30 minutes. (See the diagram on the left.)

The recording time decreases minute by minute until 0:00 appears in the display window, and the power goes off.

Notes:
- If you do not press QUICK TIMER again within 30 seconds, the VTR goes off automatically.
- If you insert a cassette without a safety tab, the VTR ejects cassette when you press QUICK TIMER.

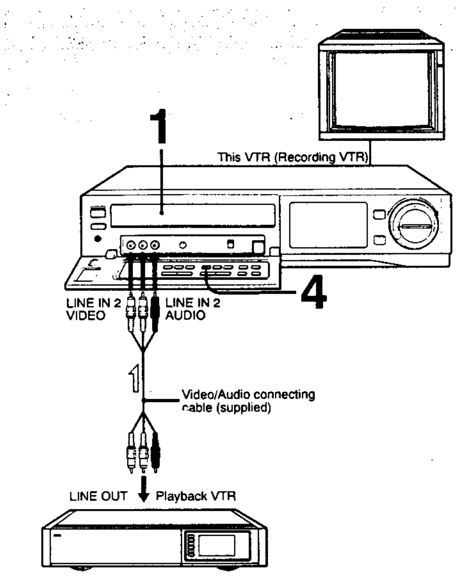
If the VTR is already in the timer-activated recording standby mode
Press TIMER REC ON/OFF to turn off the TIMER REC indicator in the display window and then follow steps 3, 4 and 5.

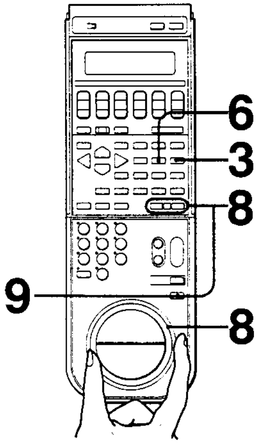
If the power is interrupted during quick-timer recording
Recording stops and the VTR goes off. If the power interruption lasts less than an hour, and if the power returns within the quick-timer duration, recording resumes from that instant.

■ **Usable buttons while the quick-timer recording is performed**

- TIMER REC ON/OFF stops quick-timer recording.
- QUICK TIMER (only on the VTR) changes the recording duration.
- TIMER ON SCREEN (only on the Remote Commander) displays the programme list on the TV screen.
- COUNTER RESET (only on the Remote Commander) resets the counter to zero.
- INDEX MARK (only on the Remote Commander) marks an index signal.
- TV/VTR switches the screen to another programme received on the TV.

Editing





You can create your own home-made video programmes by editing with another VTR and audio-dubbing new sound. This will expand your video enjoyment.

Editing from Another VTR

This section shows you how to edit your tape using this VTR as a recording VTR and another VTR as a playback VTR.
For connections, refer to "Connecting Another VTR" on page 9.

1 **Insert a cassette with a safety tab into this VTR.**

2 **Turn on the power of the playback VTR and insert a source cassette.**

3 **Press INPUT SELECT on this VTR to select LINE 2.**

4 **Press EDIT of this VTR to ON.**

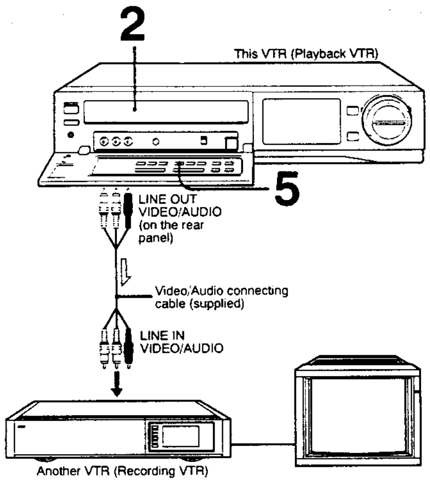
5 **Activate the EDIT function if the playback VTR has it.**

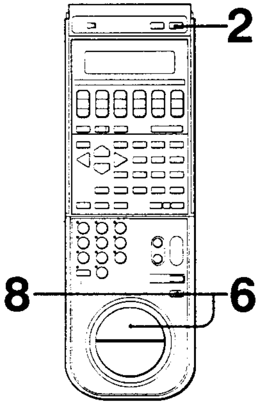
6 **Press REC MODE of this VTR to select the recording tape speed, SP or LP.**

7 **Find the playback start point and set the playback VTR to playback pause.**

8 **Find the recording start point and set this VTR to recording pause.**

9 **Press ‖ PAUSE on both VTRs.**


2
This VTR (Playback VTR)
5
LINE OUT VIDEO/AUDIO (on the rear panel)
Video/Audio connecting cable (supplied)
LINE IN VIDEO/AUDIO
Another VTR (Recording VTR)



Editing onto Another VTR

This section shows you how to edit your tape using this VTR as a playback VTR and another VTR as a recording VTR.
For connection, refer to "Connecting Another VTR" on page 10.

1 **Insert a cassette with a safety tab into the recording VTR.**

2 **Turn on the power of this VTR and insert a source cassette.**

3 **Select this VTR as the source on the recording VTR.**

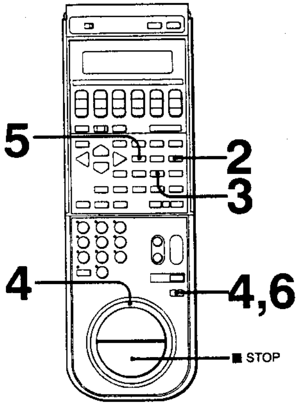
4 **Select the recording tape speed (SP or LP) on the recording VTR.**

5 **Press EDIT to ON so that the EDIT function activates.**

6 **Find the playback start point and set this VTR to playback pause.**

7 **Find the recording start point and set the recording VTR to recording pause.**

8 **Press II PAUSE on both VTRs.**



Audio Dubbing

This section shows you how to over-dub new sound onto the pre-recorded normal track. This way you can replace unnecessary sound with some other sound.
For connections, see "Connecting Audio Equipment" on page 11.

1 **Insert a pre-recorded cassette into the VTR, and prepare a microphone, stereo system, or other audio source.**

2 **When you use a stereo audio system or other audio source, press INPUT SELECT until the LINE L2 indication appears in the display window of the VTR.**
When a microphone is connected, the sound from the microphone is automatically selected.

3 **Find the audio dubbing end point and press COUNTER RESET.**
The counter shows "0H00M00S". The end point is memorized.

4 **Find the audio dubbing start point and press II PAUSE to set the VTR to playback pause.**
The DUAL MODE SHUTTLE ring is useful for this operation.

5 **Press AUDIO DUB.**

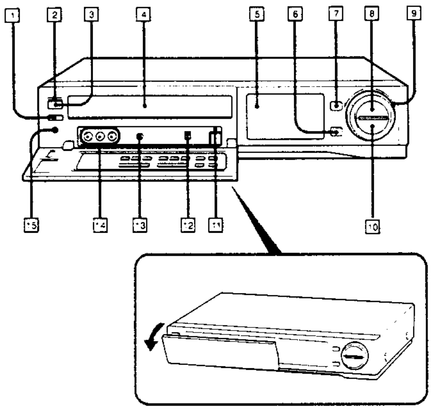
6 **Press II PAUSE to release the pause, and at the same time start talking into the microphone, playing an audio system, playing back a VTR, etc.**
At the end point (0H00M00S), sound insertion stops automatically.

To stop audio dubbing momentarily,
press II PAUSE.

To stop on-going audio dubbing,
press ■ STOP.

Notes:
- Disconnect the microphone when sound from another audio source is to be recorded.
- You cannot perform audio dubbing on an unrecorded portion of the tape.

Identifying Parts and Controls



Front Panel

See the indicated pages.

1 ⏏ **EJECT button** 23

2 **ON/STANDBY LED**

3 ⏻ **ON/STANDBY switch**

4 **Cassette compartment** 23

5 **Display window and function mode display** 69

6 ❚❚ **PAUSE button** 33

7 ◀◀◀ **HI-SPEED REWIND button** 25

8 ▷ **PLAY button** 24

9 **DUAL MODE SHUTTLE ring** 51

10 ■ **STOP button** 24

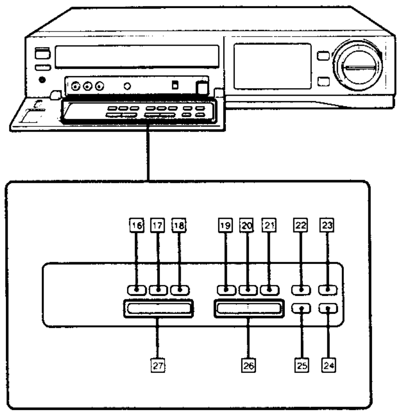
11 **CL (clear) button** 72

12 **COLOUR SYSTEM (PAL/MESECAM) selector (SLV-625VP only)** 24

13 **SHARPNESS SOFT/SHARP control** 26

14 **LINE IN 2 VIDEO/AUDIO jacks (phono type)** 8

15 **MIC jack (mini type)** 11



16 **TV/VTR button** 24

17 **INPUT SELECT button** 31

18 **REC MODE (SP/LP) button** 31

19 **EDIT ON/OFF button** 63

20 **AUDIO DUB button** 65

21 **VPS (Video Programme System) ON/OFF switch (SLV-625VP only)** 50

22 **QUICK TIMER button** 61

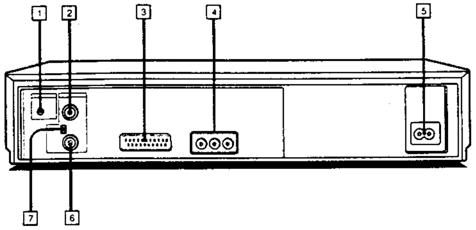
23 **TIMER REC ON/OFF button** 40

24 ● **REC (record) button** 31

25 **TRACKING AUTO/MANUAL button** 27

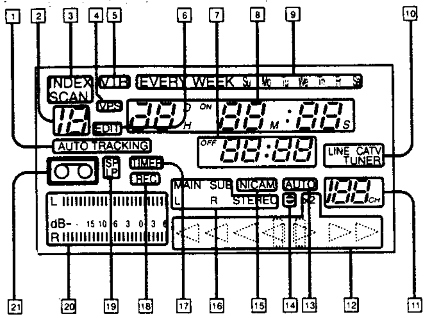
26 **TRACKING NORMAL/SLOW and STILL ADJUST ▼/▲ button** 27

27 **PROGRAM +/− button**



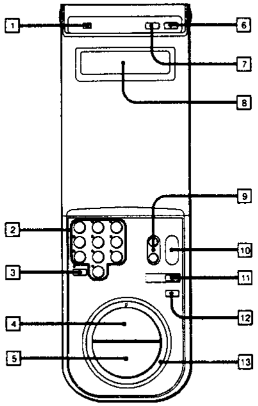
Rear Panel

1. RF CHANNEL screw (30 to 39) 15
2. AERIAL OUT socket 7
3. ⟴ EURO-AV (21-pin) 7
4. LINE OUT VIDEO/AUDIO jacks (phono type) 10
5. AC INPUT connector 7
6. AERIAL IN socket 7
7. DX/LOCAL switch 19


1
2
3
4
5
6
7
8
9
10
INDEX SCAN
VTR
EVERY WEEK
VPS
EDIT
ON
H
M
S
AUTO TRACKING
OFF
LINE CATV TUNER
SP LP
TIMER
REC
MAIN SUB
NICAM
AUTO
L R
STEREO
CH
L
dB-
R
21
20
19
18
17
16
15
14
13
12
11

Indications in the Display Window

1. AUTO TRACKING (Automatic Tracking) 27
2. Index number 58
3. INDEX SCAN 58
4. VPS (SLV-625VP only) 50
5. VTR
6. EDIT 63
7. Current time, end time of timer-activated recording, and quick-timer recording time
8. Linear time counter and start time of timer-activated recording 32, 48
9. Day of the week
10. Input mode 14, 15
11. Programme position 31
12. Tape operation
13. AUTO (AUTO MENU) 54
14. Audio dub 65
15. NICAM (SLV-625NC/625UB only) 36
16. STEREO/BILINGUAL 37
17. TIMER recording 39
18. REC (Recording) 31
19. Tape speed 31
20. Audio Level
21. Cassette 23



Remote Commander (Cover Closed)

1 **TV/VTR remote control selector** 12

2 **Programme position number buttons** 31

3 **-/- -(10's digit) button** 31

4 **▷ PLAY button** 24

5 **■ STOP button** 24

6 **⏻ ON/STANDBY button** 16

7 **TV/VTR button** 24

8 **Liquid-crystal display (LCD)** 13

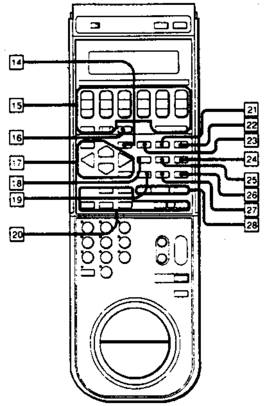
9 **PROG +/− button**

10 **VOL (TV volume) +/− button**

11 **REPLAY button** 53

12 **II PAUSE button** 51

13 **DUAL MODE SHUTTLE ring** 51



Remote Commander (Cover Opened)

14 **TIMER ON SCREEN button** 46

15 **Timer recording/clock buttons** 13, 39

1 TIMER SET
2 DAY
3 TURN ON time
4 TURN OFF time
5 PROG (programme position) +/−
6 TRANSMIT
CLOCK SET(SET/START)

16 **MEMORY button** 49

17 **Menu operation buttons** 16
MENU
CURSOR (▲/▼/◀/▶)
EXECUTE

18 **AUDIO DUB button** 65

19 **AUDIO MONITOR button** 29

20 **Tape transport buttons**
● REC (recording)
◀◀◀ HI-SPEED REWIND
⏪/⏩ SEARCH (reverse/forward)
◀II FRAME II▶ /</>

21 **TIMER REC CLEAR button** 48

22 **TIMER REC ON/OFF button** 46

23 **TIMER REC CHECK button** 47

24 **INPUT SELECT button** 16

25 **REC MODE button** 31

26 **DATA SCREEN button** 31

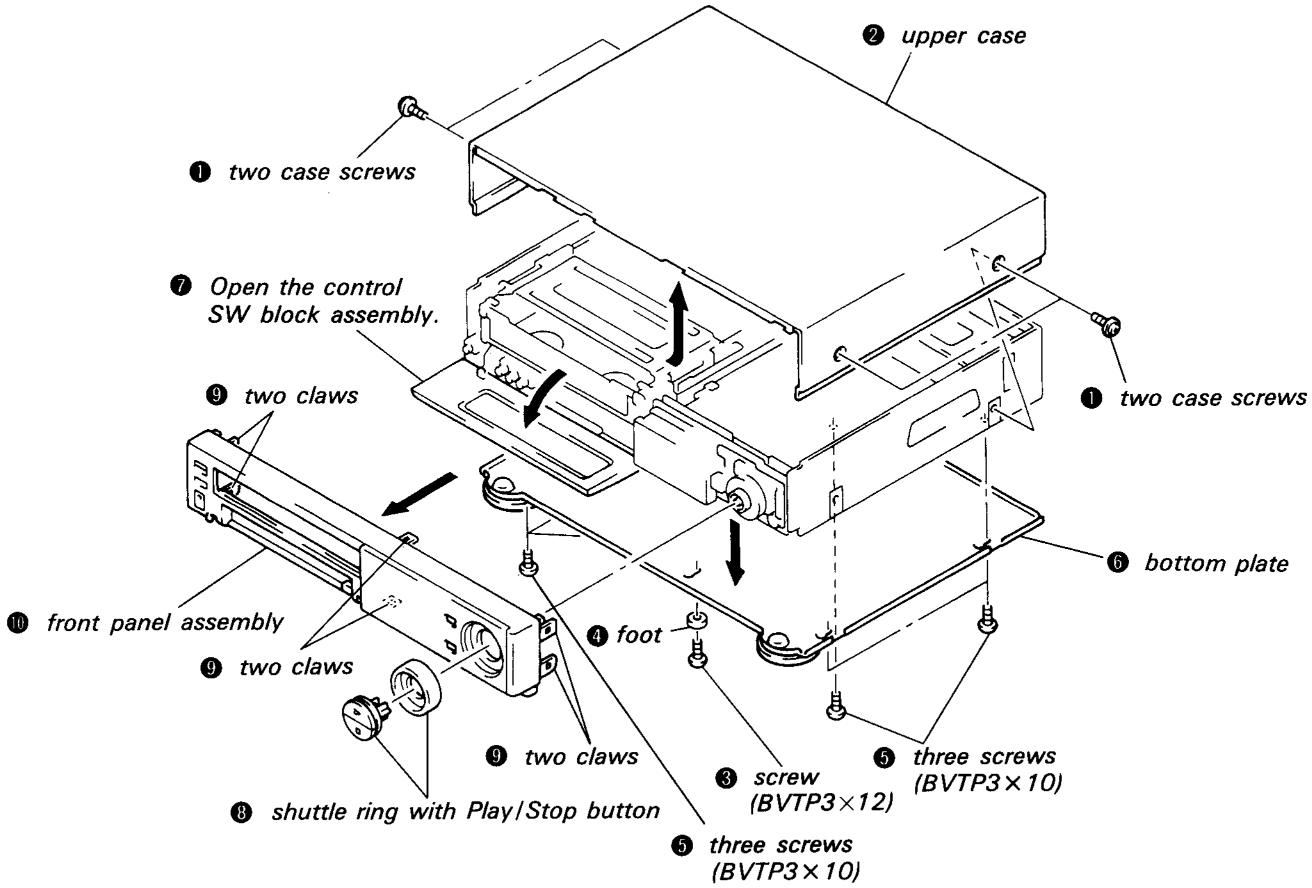
27 **COUNTER RESET button** 32

28 **INDEX buttons** 57 - 60
INDEX
MARK
ERASE

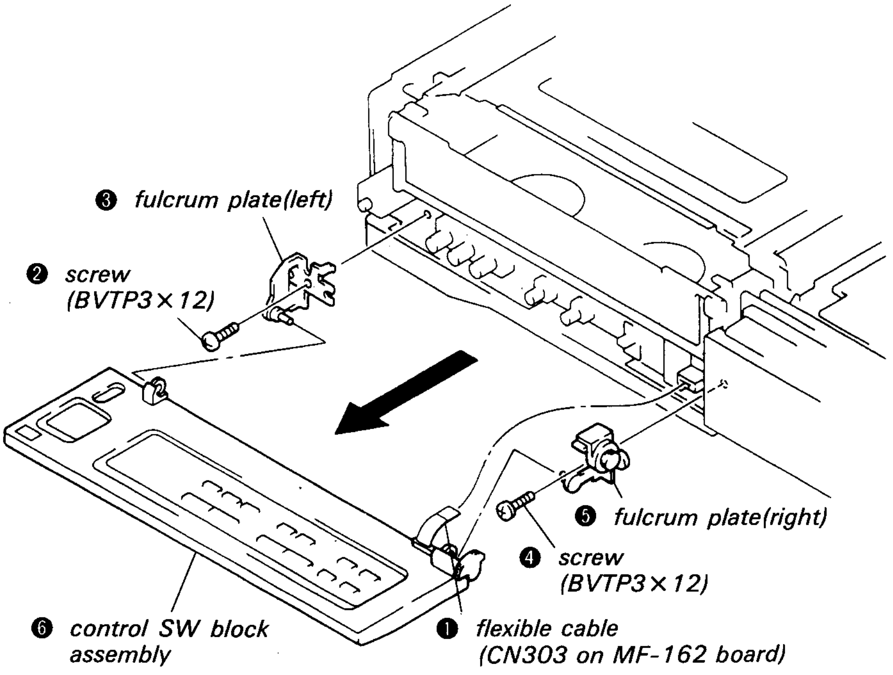
SECTION 2
DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

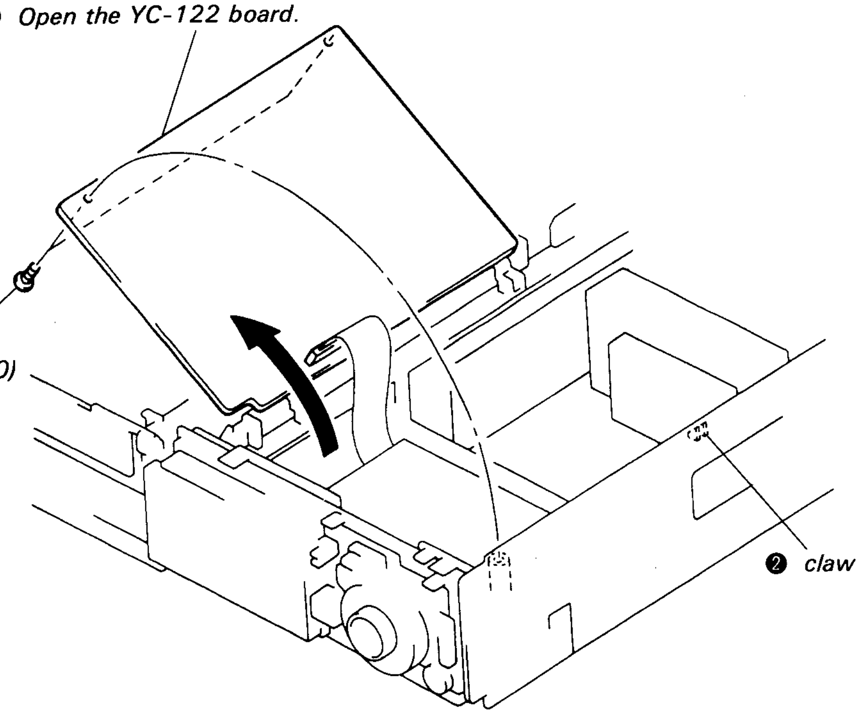
2-1. REMOVAL OF UPPER CASE, BOTTOM PLATE AND FRONT PANEL ASSEMBLIES


❷ upper case
❶ two case screws
❼ Open the control SW block assembly.
❾ two claws
❶ two case screws
❻ bottom plate
❿ front panel assembly
❾ two claws
❹ foot
❾ two claws
❸ screw (BVTP3×12)
❺ three screws (BVTP3×10)
❽ shuttle ring with Play/Stop button
❺ three screws (BVTP3×10)

2-2. REMOVAL OF CONTROL SW BLOCK ASSEMBLY


❸ fulcrum plate(left)
❷ screw (BVTP3×12)
❺ fulcrum plate(right)
❹ screw (BVTP3×12)
❻ control SW block assembly
❶ flexible cable (CN303 on MF-162 board)

2-3. OPENING OF YC-122 BOARD

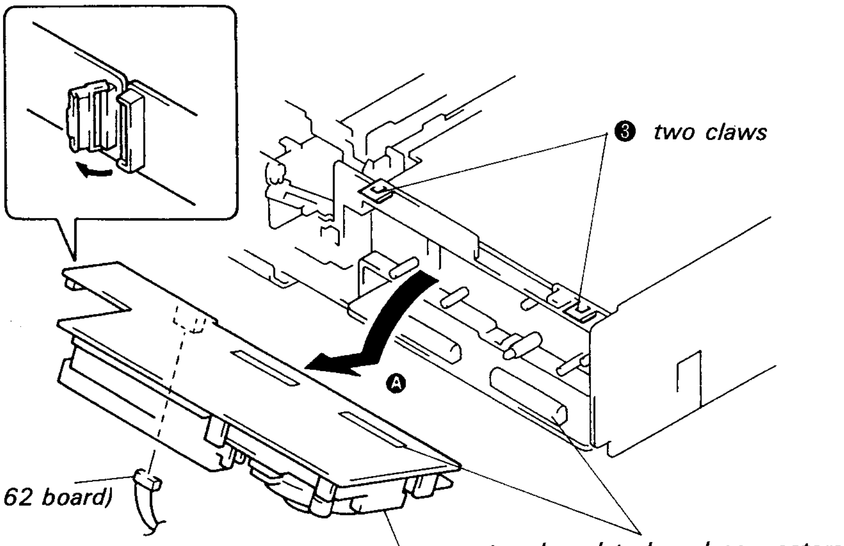


❶ *two screws (BVTP3 × 10)*

❷ *claw*

❸ *Open the YC-122 board.*

2-4. REMOVAL OF MF-162 BLOCK ASSEMBLY



❶ *connector (CN306 on MF-162 board)*

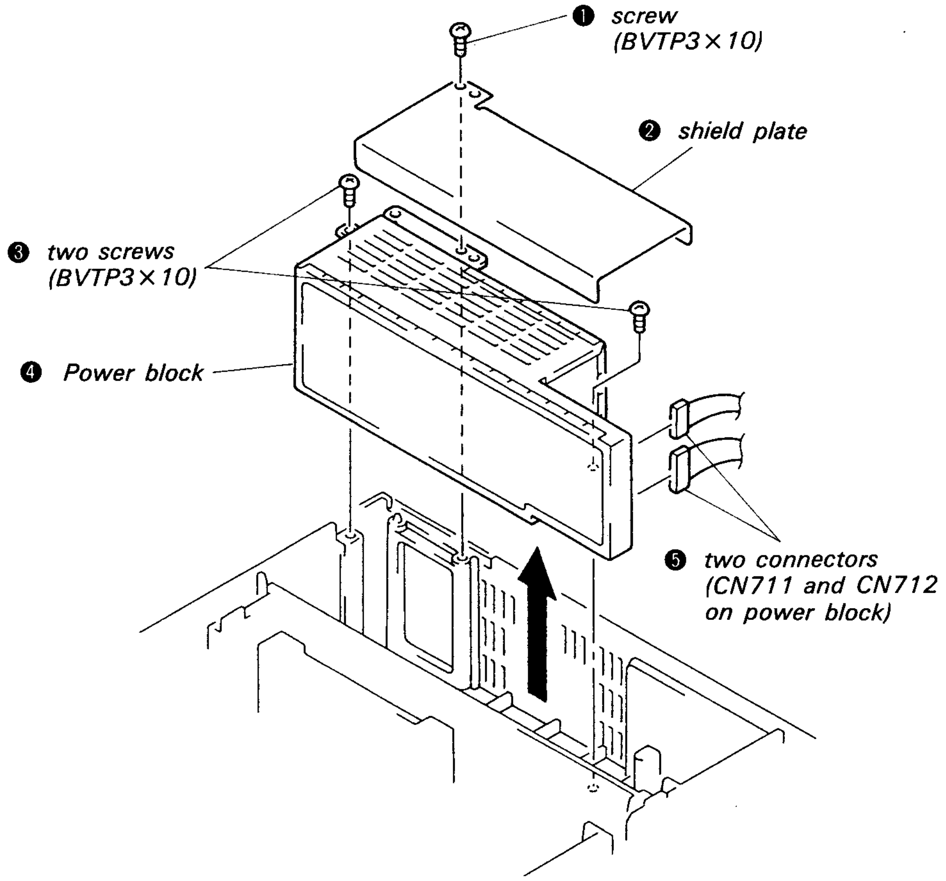
❷ *board to board connector*

❸ *two claws*

two board to board connectors

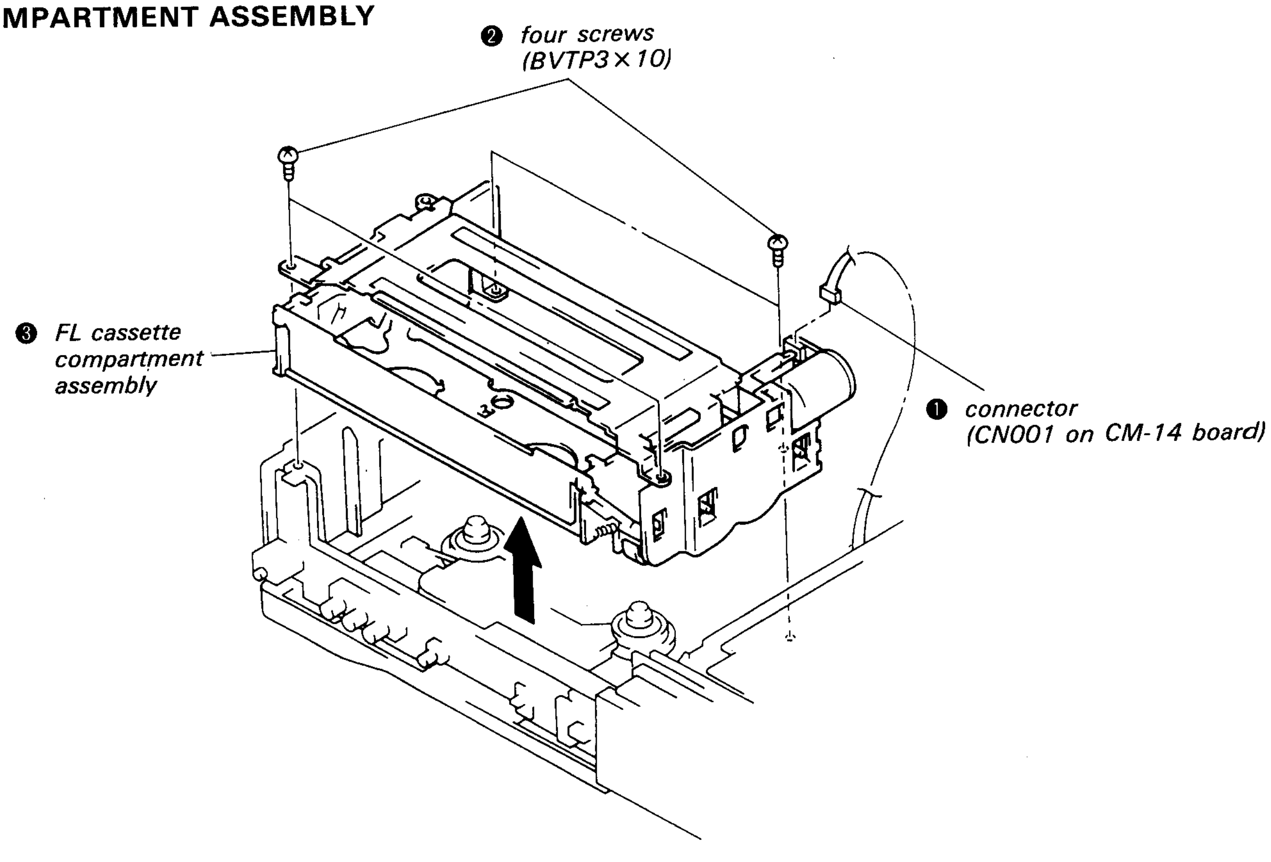
❹ *Remove the MF-162 block assembly in the direction of arrow* Ⓐ

2-5. REMOVAL OF POWER BLOCK



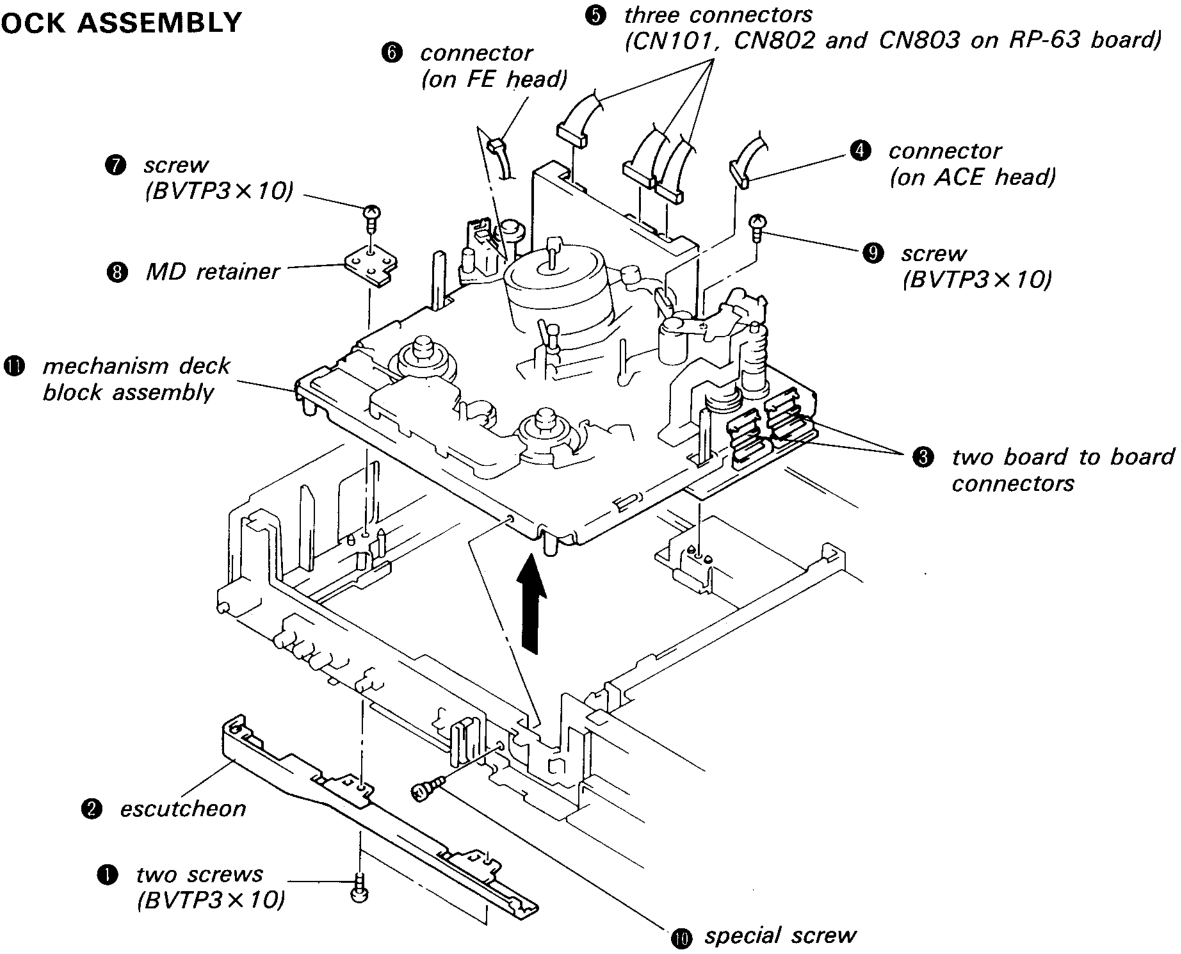
❶ screw
(BVTP3 × 10)
❷ shield plate
❸ two screws
(BVTP3 × 10)
❹ Power block
❺ two connectors
(CN711 and CN712
on power block)

2-6. REMOVAL OF FL CASSETTE COMPARTMENT ASSEMBLY

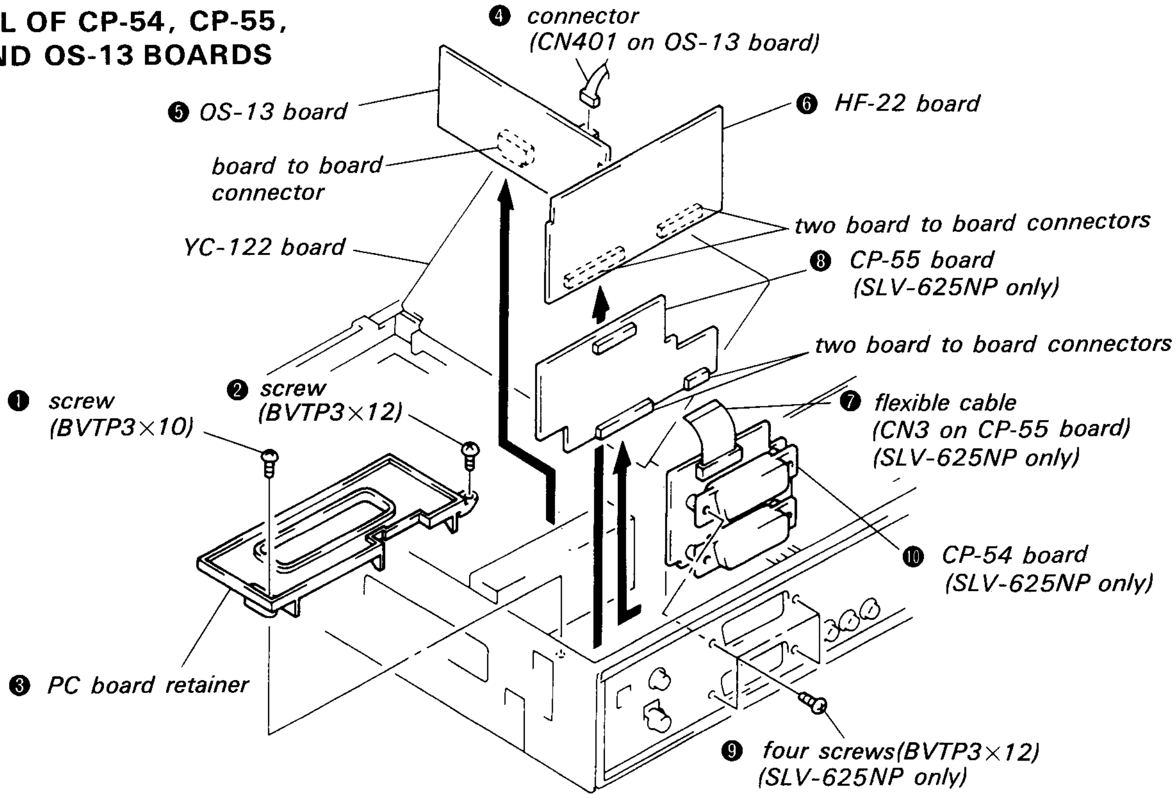


❷ four screws
(BVTP3 × 10)
❸ FL cassette
compartment
assembly
❶ connector
(CN001 on CM-14 board)

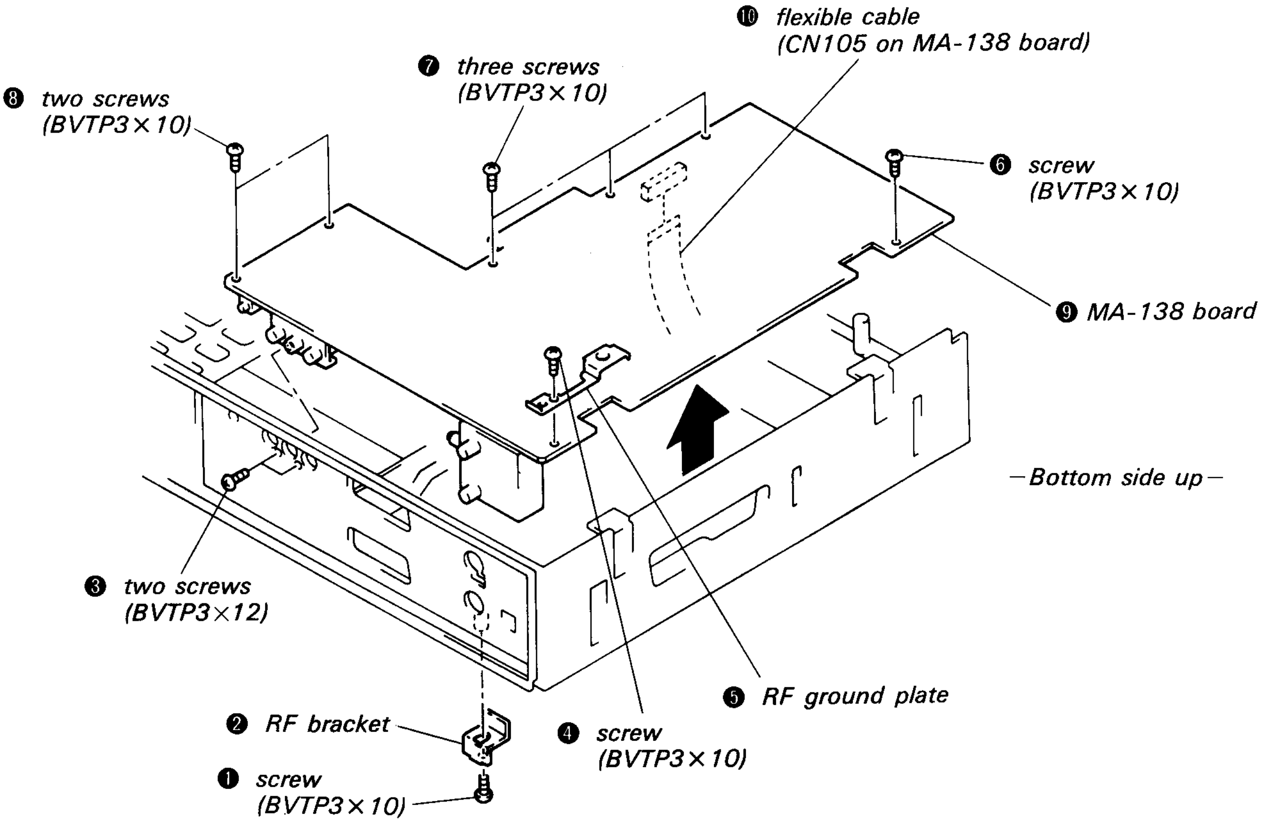
2-7. REMOVAL OF MECHANISM DECK BLOCK ASSEMBLY


❺ three connectors
(CN101, CN802 and CN803 on RP-63 board)
❻ connector
(on FE head)
❹ connector
(on ACE head)
❼ screw
(BVTP3×10)
❽ MD retainer
❾ screw
(BVTP3×10)
⓫ mechanism deck
block assembly
❸ two board to board
connectors
❷ escutcheon
❶ two screws
(BVTP3×10)
❿ special screw

2-8. REMOVAL OF CP-54, CP-55, HF-22 AND OS-13 BOARDS

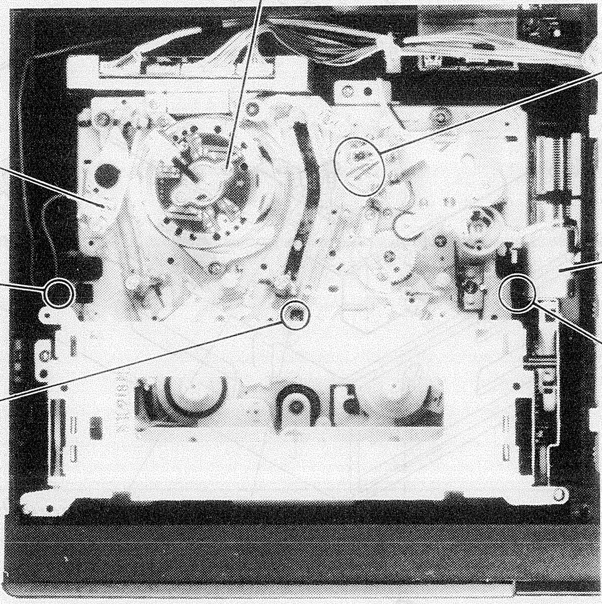

❹ connector
(CN401 on OS-13 board)
❺ OS-13 board
❻ HF-22 board
board to board
connector
YC-122 board
two board to board connectors
❽ CP-55 board
(SLV-625NP only)
two board to board connectors
❶ screw
(BVTP3×10)
❷ screw
(BVTP3×12)
❼ flexible cable
(CN3 on CP-55 board)
(SLV-625NP only)
❿ CP-54 board
(SLV-625NP only)
❸ PC board retainer
❾ four screws(BVTP3×12)
(SLV-625NP only)

2-9. REMOVAL OF MA-138 BOARD

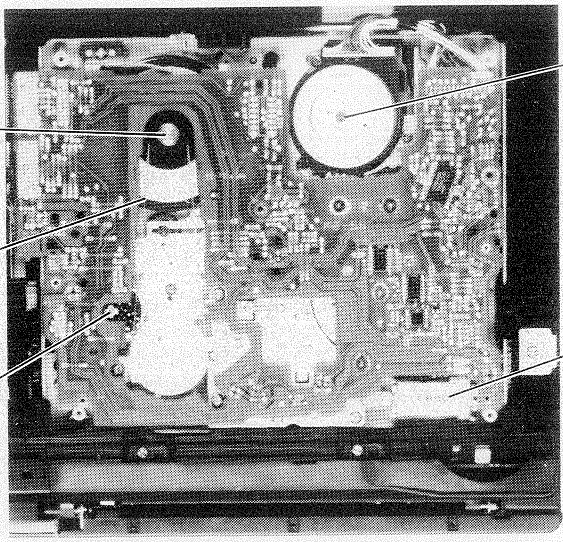

❿ flexible cable
(CN105 on MA-138 board)
❼ three screws
(BVTP3×10)
❽ two screws
(BVTP3×10)
❻ screw
(BVTP3×10)
❾ MA-138 board
−Bottom side up−
❸ two screws
(BVTP3×12)
❺ RF ground plate
❷ RF bracket
❹ screw
(BVTP3×10)
❶ screw
(BVTP3×10)

2-10. INTERNAL VIEWS

—Top Side—

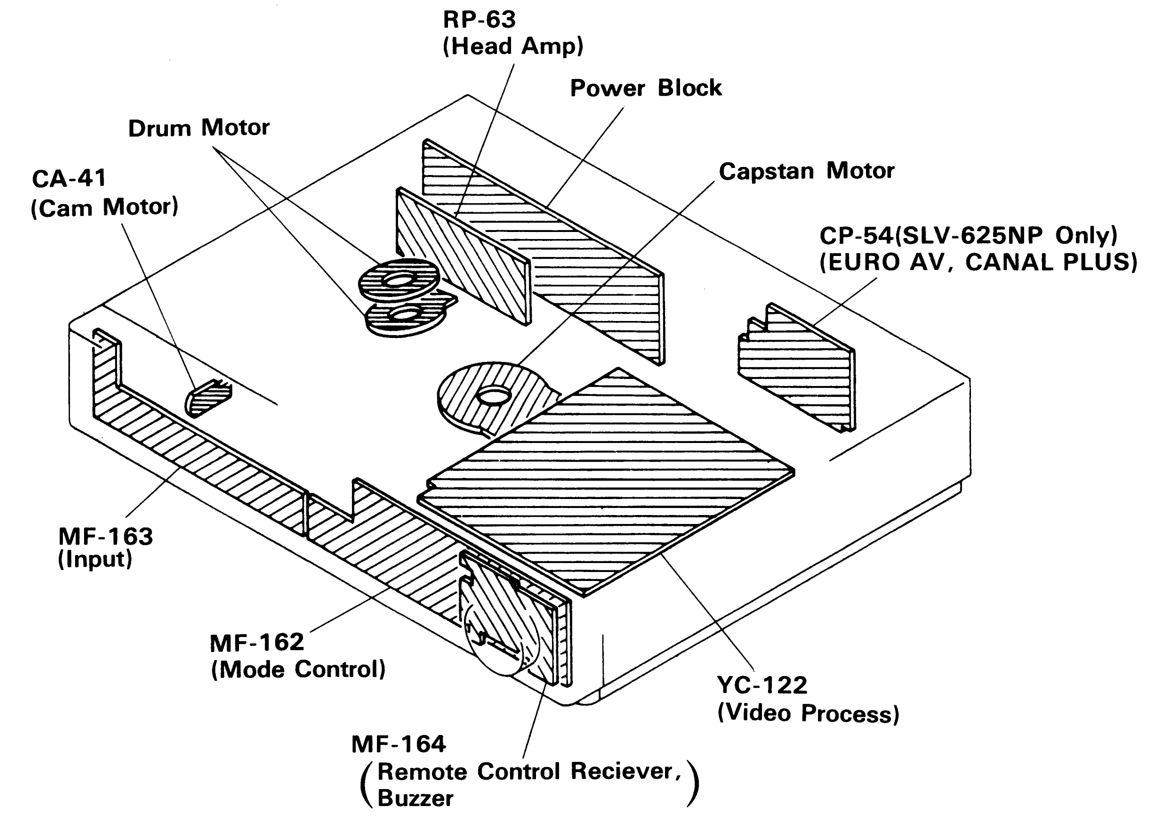

drum ass'y(DZH-43A-R)
1-550-693-11
upper drum ass'y(DZR-43-R)
1-550-694-11
ACE head block ass'y
A-6761-129-A
FE head
1-543-647-11
Q002
tape end sensor
8-729-926-31
M904
loading motor
X-3727-784-1
Q001
tape top sensor
8-729-926-31
D001
tape top/end LED
8-719-985-00

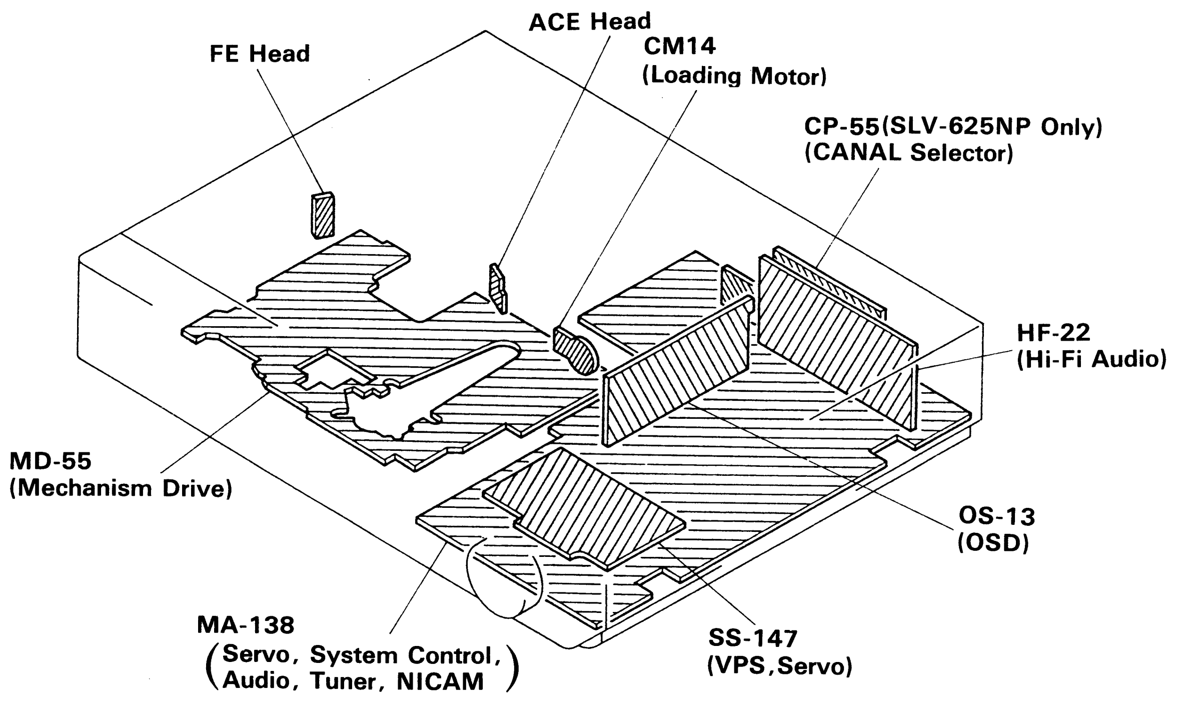
—Bottom Side—


M901
drum motor
M902
capstan motor
8-835-394-11
timing belt
3-736-013-01
M903
cam motor
X-3733-302-1
S1
rotary switch
1-692-062-11

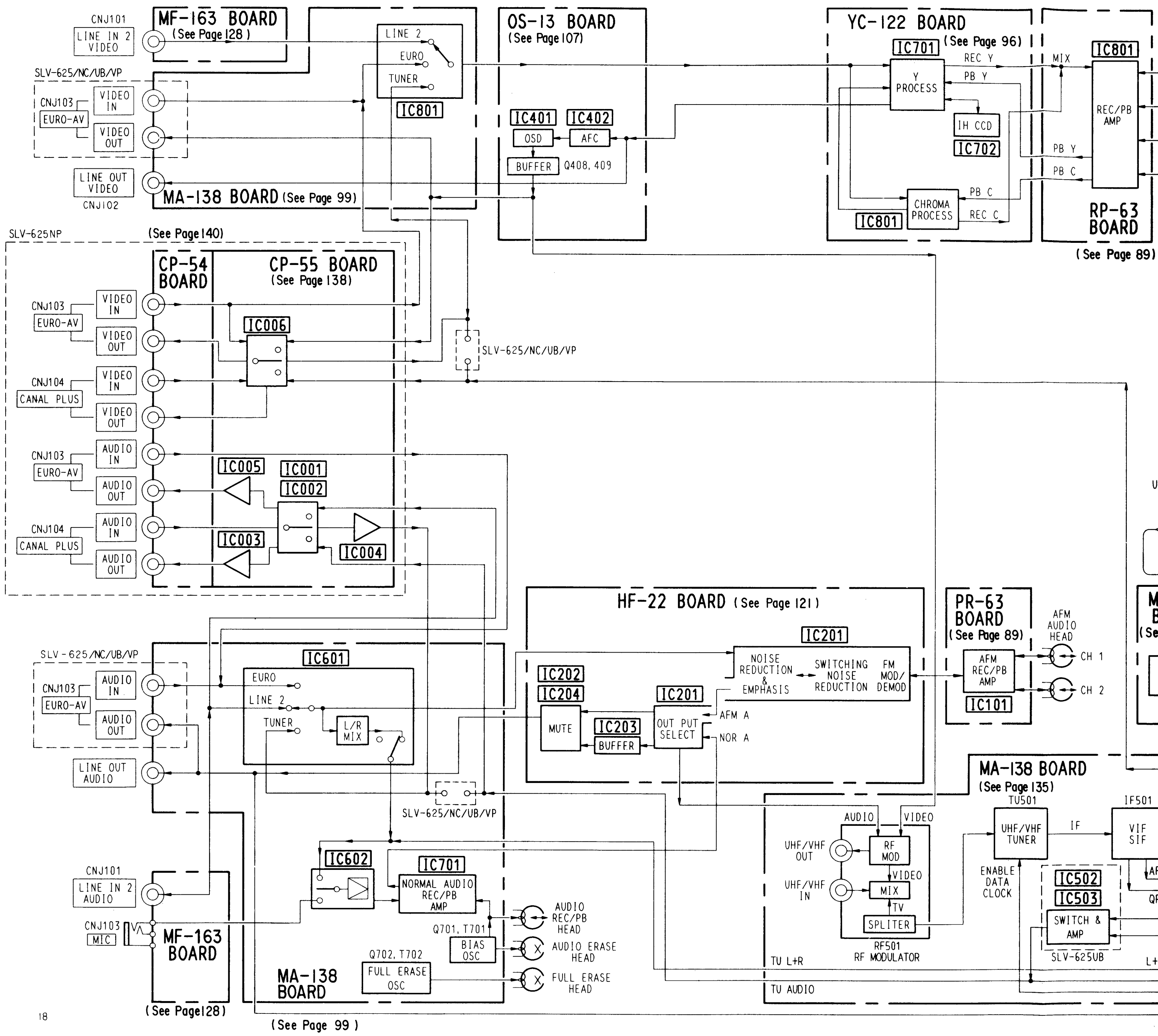
SECTION 3
DIAGRAMS

3-1. CIRCUIT BOARDS LOCATION


RP-63
(Head Amp)
Power Block
Drum Motor
CA-41
(Cam Motor)
Capstan Motor
CP-54(SLV-625NP Only)
(EURO AV, CANAL PLUS)
MF-163
(Input)
MF-162
(Mode Control)
YC-122
(Video Process)
MF-164
(Remote Control Reciever,
Buzzer)


ACE Head
FE Head
CM14
(Loading Motor)
CP-55(SLV-625NP Only)
(CANAL Selector)
HF-22
(Hi-Fi Audio)
MD-55
(Mechanism Drive)
OS-13
(OSD)
MA-138
(Servo, System Control,
Audio, Tuner, NICAM)
SS-147
(VPS,Servo)

3-2. OVERALL BLOCK DIAGRAM

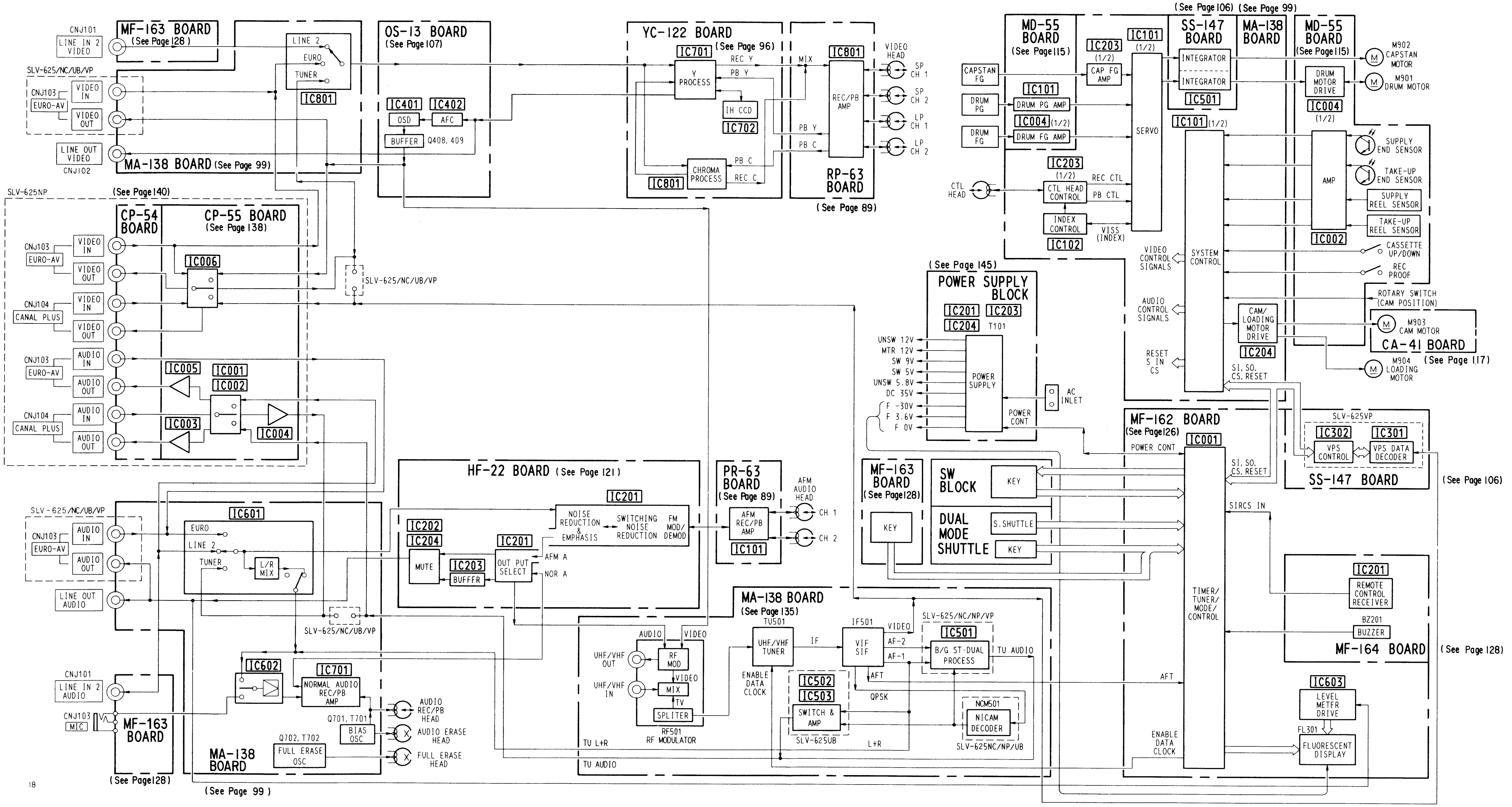

CNJ101
LINE IN 2 VIDEO
MF-163 BOARD (See Page 128)
SLV-625/NC/UB/VP
CNJ103
EURO-AV
VIDEO IN
VIDEO OUT
LINE OUT VIDEO
CNJ102
MA-138 BOARD (See Page 99)
LINE 2
EURO
TUNER
IC801
OS-13 BOARD (See Page 107)
IC401
IC402
OSD
AFC
BUFFER
Q408, 409
YC-122 BOARD
IC701 (See Page 96)
REC Y
PB Y
Y PROCESS
1H CCD
IC702
IC801
CHROMA PROCESS
PB C
REC C
MIX
PB Y
PB C
IC801
REC/PB AMP
RP-63 BOARD
(See Page 89)
SLV-625NP
(See Page 140)
CP-54 BOARD
CP-55 BOARD (See Page 138)
CNJ103
EURO-AV
CNJ104
CANAL PLUS
VIDEO IN
VIDEO OUT
AUDIO IN
AUDIO OUT
IC006
IC005
IC001
IC002
IC003
IC004
SLV-625/NC/UB/VP
HF-22 BOARD (See Page 121)
IC201
NOISE REDUCTION & EMPHASIS
SWITCHING NOISE REDUCTION
FM MOD/DEMOD
IC202
IC204
IC201
MUTE
IC203
BUFFER
OUT PUT SELECT
AFM A
NOR A
PR-63 BOARD (See Page 89)
AFM REC/PB AMP
IC101
AFM AUDIO HEAD
CH 1
CH 2
SLV-625/NC/UB/VP
CNJ103
EURO-AV
AUDIO IN
AUDIO OUT
LINE OUT AUDIO
IC601
EURO
LINE 2
TUNER
L/R MIX
SLV-625/NC/UB/VP
CNJ101
LINE IN 2 AUDIO
CNJ103
MIC
MF-163 BOARD
(See Page 128)
IC602
IC701
NORMAL AUDIO REC/PB AMP
Q701, T701
BIAS OSC
Q702, T702
FULL ERASE OSC
MA-138 BOARD
(See Page 99)
AUDIO REC/PB HEAD
AUDIO ERASE HEAD
FULL ERASE HEAD
MA-138 BOARD
(See Page 135)
TU501
UHF/VHF OUT
UHF/VHF IN
AUDIO
VIDEO
RF MOD
MIX
TV
SPLITER
RF501
RF MODULATOR
UHF/VHF TUNER
IF
ENABLE DATA CLOCK
IC502
IC503
SWITCH & AMP
SLV-625UB
IF501
VIF SIF
TU L+R
TU AUDIO
18

3-2. OVERALL BLOCK DIAGRAM

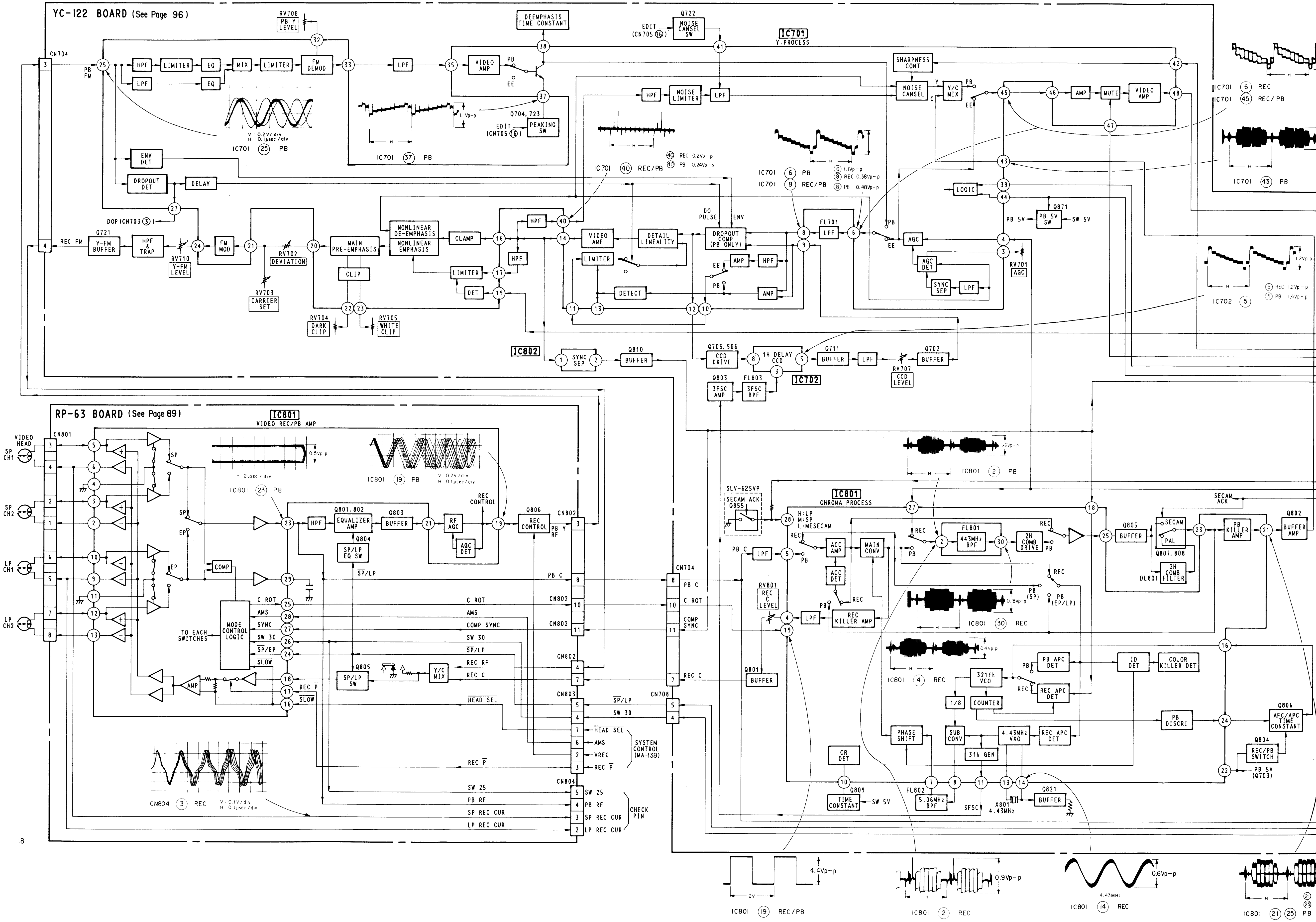
NP Only)
NAL PLUS)

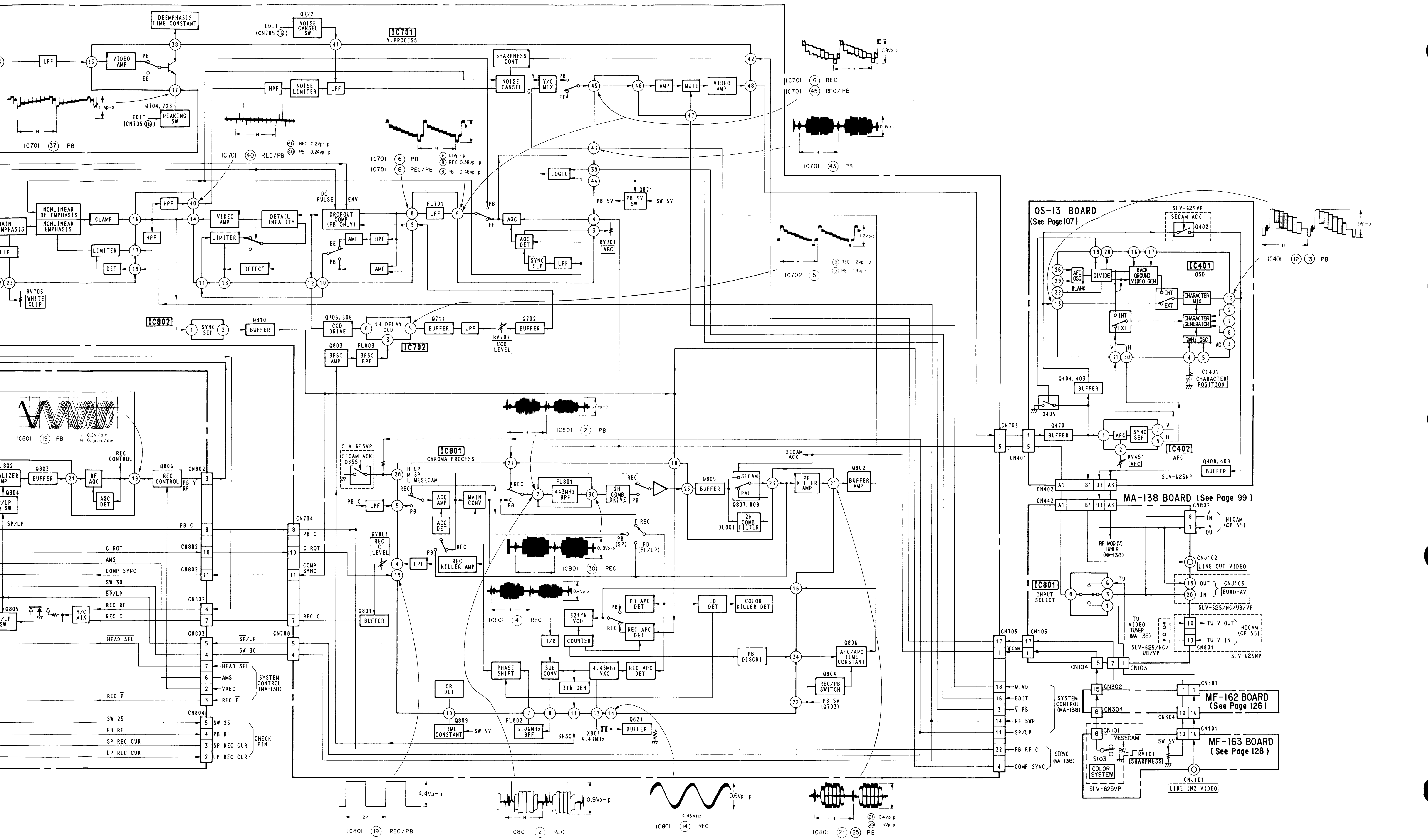
Only)

F-22
Hi-Fi Audio)

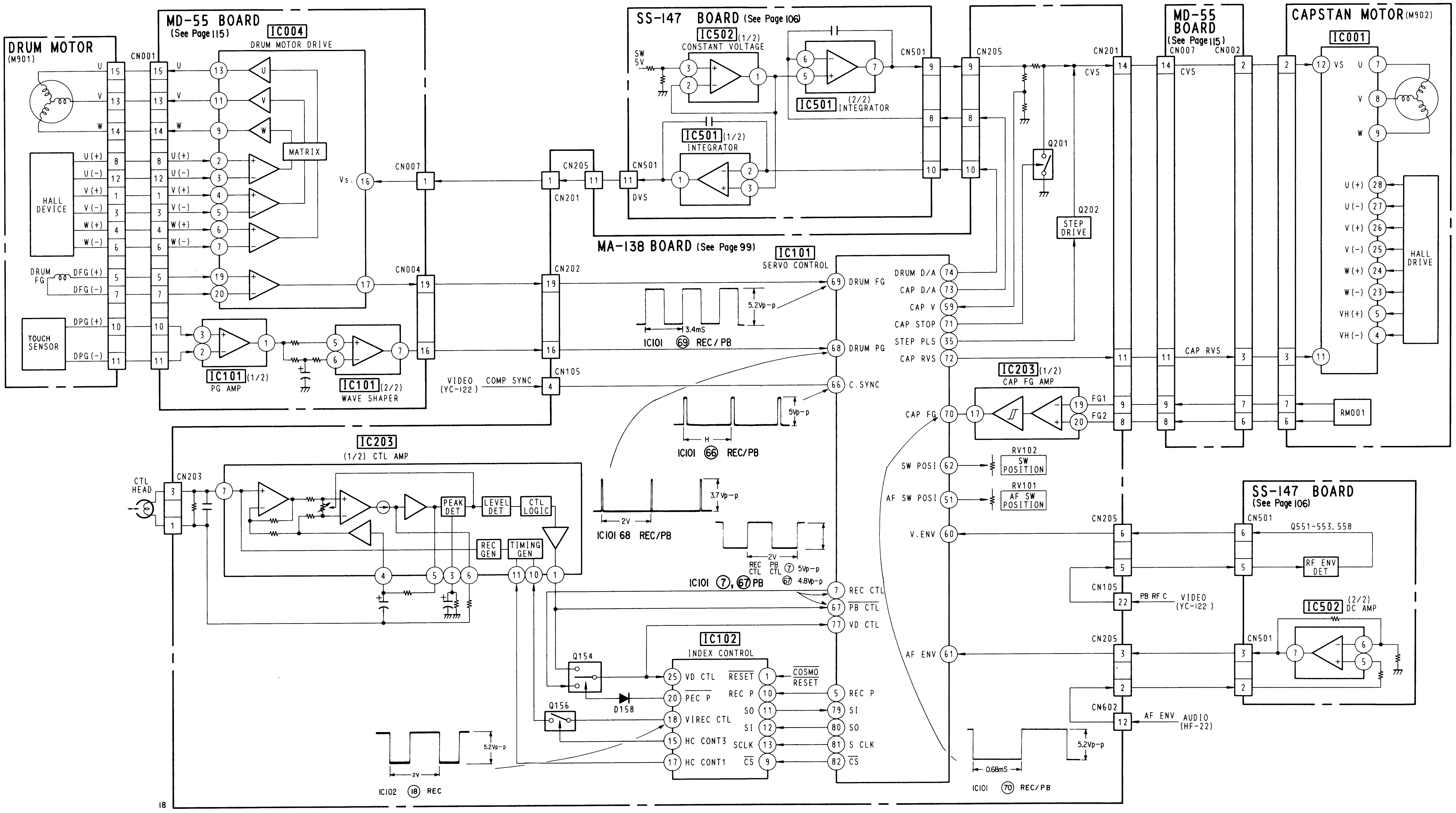

MF-163 BOARD (See Page 128)
CNJ101 LINE IN 2 VIDEO
SLV-625/NC/UB/VP
CNJ103 EURO-AV
VIDEO IN
VIDEO OUT
LINE OUT VIDEO
CNJ102
MA-138 BOARD (See Page 99)
LINE 2
EURO
TUNER
IC801
OS-13 BOARD (See Page 107)
IC401 OSD
IC402 AFC
BUFFER Q408, 409
YC-122 BOARD (See Page 96)
IC701 Y PROCESS
REC Y
PB Y
1H CCD
IC702
IC801 CHROMA PROCESS
PB C
REC C
MIX
IC801 REC/PB AMP
PB Y
PB C
RP-63 BOARD (See Page 89)
VIDEO HEAD
SP CH 1
SP CH 2
LP CH 1
LP CH 2
SLV-625NP
(See Page 140)
CP-54 BOARD
CP-55 BOARD (See Page 138)
CNJ103 EURO-AV
CNJ104 CANAL PLUS
VIDEO IN
VIDEO OUT
AUDIO IN
AUDIO OUT
IC006
IC005
IC001
IC002
IC003
IC004
SLV-625/NC/UB/VP
HF-22 BOARD (See Page 121)
IC201 NOISE REDUCTION & EMPHASIS
SWITCHING NOISE REDUCTION
FM MOD/ DEMOD
IC202
IC204
MUTE
IC203 BUFFER
IC201 OUT PUT SELECT
AFM A
NOR A
PR-63 BOARD (See Page 89)
AFM REC/PB AMP
IC101
AFM AUDIO HEAD
CH 1
CH 2
SLV-625/NC/UB/VP
CNJ103 EURO-AV
AUDIO IN
AUDIO OUT
LINE OUT AUDIO
IC601
EURO
LINE 2
TUNER
L/R MIX
SLV-625/NC/UB/VP
CNJ101 LINE IN 2 AUDIO
CNJ103 MIC
MF-163 BOARD
(See Page 128)
IC602
IC701 NORMAL AUDIO REC/PB AMP
Q701, T701
BIAS OSC
Q702, T702 FULL ERASE OSC
MA-138 BOARD
(See Page 99)
AUDIO REC/PB HEAD
AUDIO ERASE HEAD
FULL ERASE HEAD
MA-138 BOARD (See Page 135)
AUDIO
VIDEO
UHF/VHF OUT
UHF/VHF IN
RF MOD
MIX
TV
SPLITER
RF501 RF MODULATOR
TU501 UHF/VHF TUNER
IF
IF501 VIF SIF
VIDEO
AF-2
AF-1
AFT
ENABLE DATA CLOCK
IC502
IC503
SWITCH & AMP
SLV-625UB
QPSK
SLV-625/NC/NP/VP
IC501 B/G ST·DUAL PROCESS
TU AUDIO
NCM501 NICAM DECODER
SLV-625NC/NP/UB
L+R
TU L+R
TU AUDIO
MF-163 BOARD (See Page 128)
KEY
(See Page 106)
(See Page 99)
MD-55 BOARD (See Page 115)
CAPSTAN FG
DRUM PG
DRUM FG
IC101 DRUM PG AMP
IC004 (1/2) DRUM FG AMP
IC203 (1/2) CAP FG AMP
IC101 (1/2)
SERVO
SS-147 BOARD
INTEGRATOR
INTEGRATOR
IC501
MA-138 BOARD
MD-55 BOARD (See Page 115)
DRUM MOTOR DRIVE
IC004 (1/2)
M902 CAPSTAN MOTOR
M901 DRUM MOTOR
CTL HEAD
IC203 (1/2) CTL HEAD CONTROL
REC CTL
PB CTL
INDEX CONTROL
IC102
VISS (INDEX)
IC101 (1/2)
SYSTEM CONTROL
VIDEO CONTROL SIGNALS
AUDIO CONTROL SIGNALS
RESET S IN CS
AMP
IC002
SUPPLY END SENSOR
TAKE-UP END SENSOR
SUPPLY REEL SENSOR
TAKE-UP REEL SENSOR
CASSETTE UP/DOWN
REC PROOF
ROTARY SWITCH (CAM POSITION)
CAM/ LOADING MOTOR DRIVE
IC204
M903 CAM MOTOR
CA-41 BOARD
M904 LOADING MOTOR
(See Page 117)
SI, SO, CS, RESET
(See Page 145)
POWER SUPPLY BLOCK
IC201
IC203
IC204
T101
UNSW 12V
MTR 12V
SW 9V
SW 5V
UNSW 5.8V
DC 35V
F -30V
F 3.6V
F 0V
POWER SUPPLY
POWER CONT
AC INLET
MF-162 BOARD (See Page 126)
POWER CONT
IC001
SI, SO, CS, RESET
SLV-625VP
IC302 VPS CONTROL
IC301 VPS DATA DECODER
SS-147 BOARD
(See Page 106)
SW BLOCK
KEY
DUAL MODE SHUTTLE
S.SHUTTLE
KEY
SIRCS IN
TIMER/ TUNER/ MODE/ CONTROL
IC201 REMOTE CONTROL RECEIVER
BZ201 BUZZER
MF-164 BOARD
(See Page 128)
AFT
ENABLE DATA CLOCK
IC603 LEVEL METER DRIVE
FL301 FLUORESCENT DISPLAY
18

3-3. VIDEO BLOCK DIAGRAM

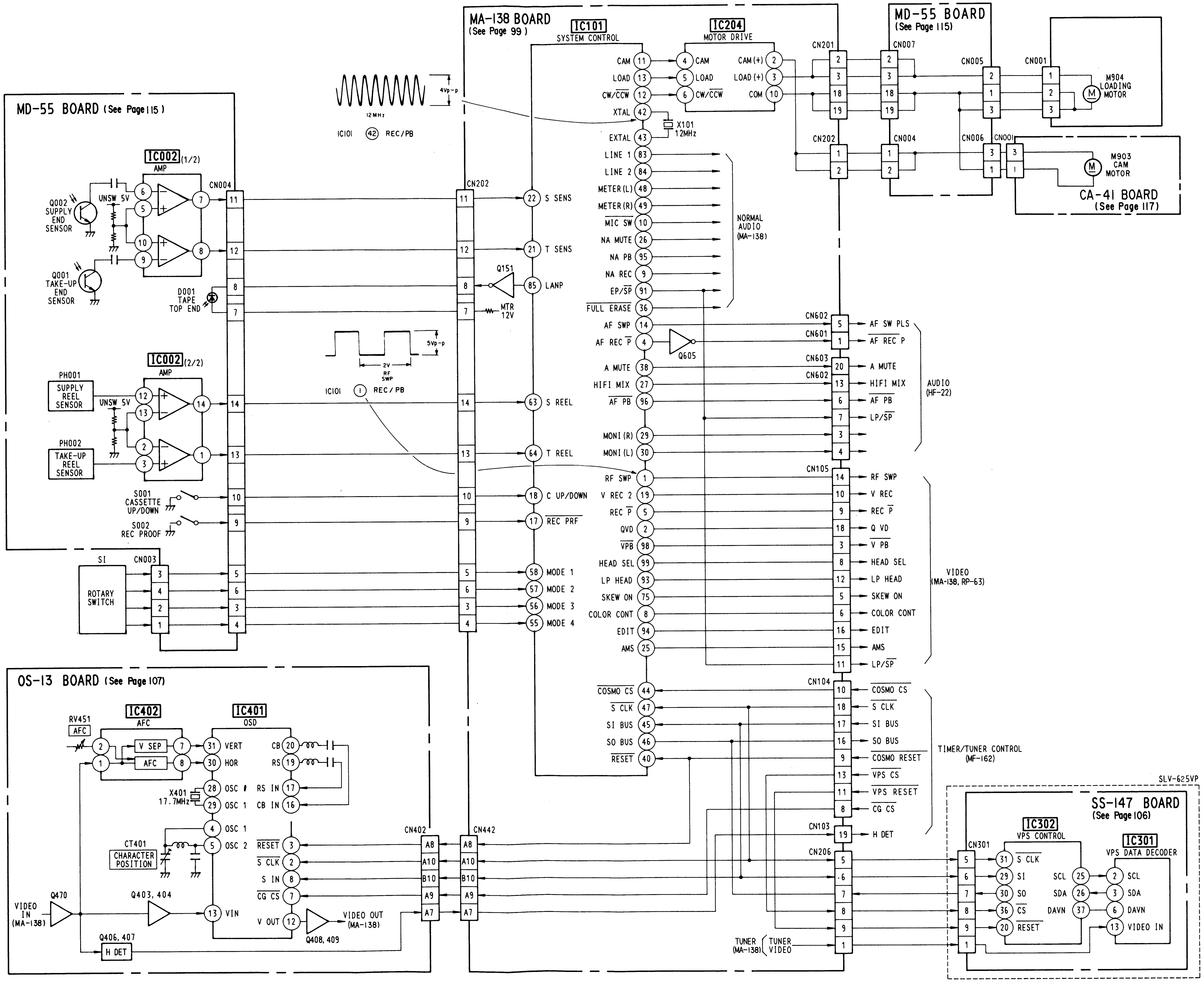

YC-122 BOARD (See Page 96)
CN704
PB FM
REC FM
HPF
LIMITER
EQ
MIX
LPF
FM DEMOD
RV708 PB Y LEVEL
DEEMPHASIS TIME CONSTANT
VIDEO AMP
Q704, 723
PEAKING SW
EDIT (CN705 ⑯)
Q722
NOISE CANSEL SW
IC701 Y.PROCESS
NOISE LIMITER
SHARPNESS CONT
NOISE CANSEL
Y/C MIX
AMP
MUTE
ENV DET
DROPOUT DET
DELAY
DOP (CN703 ③)
Q721
Y-FM BUFFER
HPF & TRAP
RV710 Y-FM LEVEL
FM MOD
RV702 DEVIATION
RV703 CARRIER SET
MAIN PRE-EMPHASIS
CLIP
RV704 DARK CLIP
RV705 WHITE CLIP
NONLINEAR DE-EMPHASIS
NONLINEAR EMPHASIS
CLAMP
DET
DETAIL LINEALITY
DO PULSE
ENV
DROPOUT COMP (PB ONLY)
DETECT
FL701
AGC
AGC DET
SYNC SEP
RV701 AGC
LOGIC
Q871
PB 5V SW
SW 5V
IC802
SYNC SEP
Q810
BUFFER
Q705, 506
CCD DRIVE
1H DELAY CCD
IC702
Q711
Q702
RV707 CCD LEVEL
Q803
3FSC AMP
FL803
3FSC BPF
IC701 ㉕ PB
IC701 ㊲ PB
IC701 ㊵ REC/PB
IC701 ⑥ PB
IC701 ⑧ REC/PB
IC701 ⑥ REC
IC701 ㊺ REC/PB
IC701 ㊸ PB
IC702 ⑤
RP-63 BOARD (See Page 89)
IC801 VIDEO REC/PB AMP
VIDEO HEAD
SP CH1
SP CH2
LP CH1
LP CH2
CN801
COMP
MODE CONTROL LOGIC
TO EACH SWITCHES
C ROT
AMS
SYNC
SW 30
SP/EP
SLOW
REC P
Q801, 802
EQUALIZER AMP
Q803
BUFFER
RF AGC
AGC DET
Q804
SP/LP EQ SW
Q805
SP/LP SW
Y/C MIX
REC CONTROL
Q806
IC801 ㉓ PB
IC801 ⑲ PB
CN804 ③ REC
CN802
CN803
CN804
PB C
C ROT
AMS
COMP SYNC
SP/LP
REC RF
REC C
HEAD SEL
SW 30
VREC
REC P
SYSTEM CONTROL (MA-138)
SW 25
PB RF
SP REC CUR
LP REC CUR
CHECK PIN
CN708
SLV-625VP
SECAM ACK Q855
IC801 CHROMA PROCESS
H:LP M:SP L:MESECAM
ACC AMP
ACC DET
MAIN CONV
FL801 4.43MHz BPF
2H COMB DRIVE
Q805 BUFFER
SECAM
PAL
Q807, 808
DL801 2H COMB FILTER
PB KILLER AMP
Q802 BUFFER AMP
RV801 REC C LEVEL
REC KILLER AMP
Q801 BUFFER
321fH VCO
1/8
COUNTER
PB APC DET
REC APC DET
ID DET
COLOR KILLER DET
PB DISCRI
Q806 AFC/APC TIME CONSTANT
Q804 REC/PB SWITCH
PB 5V (Q703)
PHASE SHIFT
SUB CONV
4.43MHz VXO
3fH GEN
CR DET
Q809 TIME CONSTANT
SW 5V
FL802 5.06MHz BPF
3FSC
X801 4.43MHz
Q821 BUFFER
IC801 ② PB
IC801 ㉚ REC
IC801 ④ REC
IC801 ⑲ REC/PB
IC801 ② REC
IC801 ⑭ REC
IC801 ㉑ ㉕ PB
4.4Vp-p
0.9Vp-p
0.6Vp-p
18


IC701
Y.PROCESS
DEEMPHASIS TIME CONSTANT
Q722
NOISE CANSEL SW
EDIT (CN705 ⑮)
LPF
VIDEO AMP
PB
EE
Q704, 723
PEAKING SW
IC701 ㊲ PB
IC701 ㊵ REC/PB
㊵ REC 0.2Vp-p
㊵ PB 0.24Vp-p
IC701 ⑥ PB
IC701 ⑧ REC/PB
⑥ 1.1Vp-p
⑧ REC 0.38Vp-p
⑧ PB 0.48Vp-p
SHARPNESS CONT
NOISE CANSEL
Y/C MIX
HPF
NOISE LIMITER
AMP
MUTE
VIDEO AMP
IC701 ⑥ REC
IC701 ㊺ REC/PB
IC701 ㊸ PB
0.9Vp-p
0.3Vp-p
LOGIC
Q871
PB 5V SW
PB 5V
SW 5V
NONLINEAR DE-EMPHASIS
NONLINEAR EMPHASIS
CLAMP
LIMITER
DET
DETECT
DETAIL LINEALITY
DO PULSE
ENV
DROPOUT COMP (PB ONLY)
FL701
AGC
AGC DET
SYNC SEP
RV701 AGC
RV705 WHITE CLIP
IC702 ⑤
⑤ REC 1.2Vp-p
⑤ PB 1.4Vp-p
IC802
SYNC SEP
Q810
BUFFER
Q705, 506
CCD DRIVE
1H DELAY CCD
IC702
Q711
Q702
RV707 CCD LEVEL
Q803
3FSC AMP
FL803
3FSC BPF
IC801 ② PB
IC801 ⑲ PB
V 0.2V/div
H 0.1μsec/div
REC CONTROL
Q803
RF AGC
AGC DET
Q806
Q804
CN802
PB C
C ROT
AMS
COMP SYNC
SW 30
SP/LP
REC RF
REC C
HEAD SEL
REC P
SW 25
PB RF
SP REC CUR
LP REC CUR
CN803
CN804
HEAD SEL
VREC
SYSTEM CONTROL (MA-138)
CHECK PIN
CN704
CN708
SLV-625VP
SECAM ACK
Q855
IC801
CHROMA PROCESS
H:LP
M:SP
L:MESECAM
ACC AMP
ACC DET
MAIN CONV
FL801
443MHz BPF
2H COMB DRIVE
Q805
SECAM
PAL
Q807, 808
DL801
2H COMB FILTER
PB KILLER AMP
Q802
BUFFER AMP
RV801 REC C LEVEL
REC KILLER AMP
Q801
IC801 ㉚ REC
IC801 ④ REC
0.18Vp-p
0.4Vp-p
PB (SP)
PB (EP/LP)
PB APC DET
321fh VCO
REC APC DET
1/8
COUNTER
ID DET
COLOR KILLER DET
PB DISCRI
Q806
AFC/APC TIME CONSTANT
REC/PB SWITCH
PB 5V (Q703)
PHASE SHIFT
SUB CONV
4.43MHz VXO
3fh GEN
CR DET
Q809
TIME CONSTANT
FL802
5.06MHz BPF
3FSC
X801 4.43MHz
Q821
IC801 ⑲ REC/PB
4.4Vp-p
2V
IC801 ② REC
0.9Vp-p
IC801 ⑭ REC
0.6Vp-p
4.43MHz
IC801 ㉑ ㉕ PB
㉑ 0.4Vp-p
㉕ 1.3Vp-p
OS-13 BOARD (See Page107)
SLV-625VP
SECAM ACK
Q402
IC401
OSD
AFC OSC
DIVIDE
BACK GROUND VIDEO GEN
BLANK
INT
EXT
CHARACTER MIX
CHARACTER GENERATOR
7MHz OSC
CT401 CHARACTER POSITION
Q404, 403
Q405
Q470
AFC
RV451 AFC
IC402
Q408, 409
SLV-625NP
IC401 ⑫ ⑬ PB
2Vp-p
CN703
CN401
CN402
CN442
MA-138 BOARD (See Page 99)
CN802
V IN
V OUT
NICAM (CP-55)
RF MOD (V) TUNER (MA-138)
CNJ102 LINE OUT VIDEO
IC801 INPUT SELECT
TU
OUT
IN
CNJ103 EURO-AV
SLV-625/NC/UB/VP
TU VIDEO TUNER (MA-138)
TU V OUT
TU V IN
CN801
CN705
CN105
CN104
CN103
Q.VD
EDIT
V PB
RF SWP
SP/LP
PB RF C
COMP SYNC
SERVO (MA-138)
CN301
CN302
CN304
MF-162 BOARD (See Page 126)
CN101
MF-163 BOARD (See Page 128)
MESECAM
PAL
S103 COLOR SYSTEM
SW 5V
RV101 SHARPNESS
CNJ101 LINE IN2 VIDEO

3-4. SERVO BLOCK DIAGRAM


DRUM MOTOR (M901)
MD-55 BOARD (See Page 115)
IC004 DRUM MOTOR DRIVE
MATRIX
HALL DEVICE
DRUM FG
TOUCH SENSOR
CN001
CN007
CN004
IC101 (1/2) PG AMP
IC101 (2/2) WAVE SHAPER
VIDEO (YC-122) COMP SYNC
SS-147 BOARD (See Page 106)
IC502 (1/2) CONSTANT VOLTAGE
IC501 (2/2) INTEGRATOR
IC501 (1/2) INTEGRATOR
CN501
CN205
CN201
DVS
CVS
Q201
Q202 STEP DRIVE
MA-138 BOARD (See Page 99)
IC101 SERVO CONTROL
DRUM FG
DRUM PG
C.SYNC
DRUM D/A
CAP D/A
CAP V
CAP STOP
STEP PLS
CAP RVS
CAP FG
SW POSI
AF SW POSI
V.ENV
AF ENV
REC CTL
PB CTL
VD CTL
REC P
SI
SO
S CLK
CS
CN202
CN105
5.2Vp-p
3.4mS
IC101 69 REC/PB
5Vp-p
H
IC101 66 REC/PB
3.7Vp-p
2V
IC101 68 REC/PB
REC CTL PB CTL 7 5Vp-p 67 4.8Vp-p
IC101 7, 67 PB
IC203 (1/2) CTL AMP
CTL HEAD
CN203
PEAK DET
LEVEL DET
CTL LOGIC
REC GEN
TIMING GEN
Q154
Q156
D158
IC102 INDEX CONTROL
VD CTL
PEC P
VIREC CTL
HC CONT3
HC CONT1
RESET
REC P
SO
SI
SCLK
CS
COSMO RESET
5.2Vp-p
2V
IC102 18 REC
18
IC203 (1/2) CAP FG AMP
FG1
FG2
RV102 SW POSITION
RV101 AF SW POSITION
MD-55 BOARD (See Page 115)
CN007 CN002
CAPSTAN MOTOR (M902)
IC001
VS
U V W
U(+) U(-) V(+) V(-) W(+) W(-) VH(+) VH(-)
HALL DRIVE
RM001
SS-147 BOARD (See Page 106)
CN501
Q551-553, 558
RF ENV DET
PB RF C VIDEO (YC-122)
IC502 (2/2) DC AMP
CN602
AF ENV AUDIO (HF-22)
0.68mS
IC101 70 REC/PB

3-5. SYSTEM CONLTROL BLOCK DIAGRAM



MA-138 BOARD (See Page 99)
IC101 SYSTEM CONTROL
IC204 MOTOR DRIVE
CAM 11
LOAD 13
CW/CCW 12
XTAL 42
EXTAL 43
X101 12MHz
4 CAM
5 LOAD
6 CW/CCW
CAM(+) 2
LOAD(+) 3
COM 10
LINE 1 83
LINE 2 84
METER(L) 48
METER(R) 49
MIC SW 10
NA MUTE 26
NA PB 95
NA REC 9
EP/SP 91
FULL ERASE 36
AF SWP 14
AF REC P 4
Q605
A MUTE 38
HIFI MIX 27
AF PB 96
MONI(R) 29
MONI(L) 30
RF SWP 1
V REC 2 19
REC P 5
QVD 2
VPB 98
HEAD SEL 99
LP HEAD 93
SKEW ON 75
COLOR CONT 8
EDIT 94
AMS 25
COSMO CS 44
S CLK 47
SI BUS 45
SO BUS 46
RESET 40
NORMAL AUDIO (MA-138)
22 S SENS
21 T SENS
85 LANP
Q151
MTR 12V
63 S REEL
64 T REEL
18 C UP/DOWN
17 REC PRF
58 MODE 1
57 MODE 2
56 MODE 3
55 MODE 4
CN202
12MHz
4Vp-p
IC101 42 REC/PB
5Vp-p
2V RF SWP
IC101 1 REC/PB
MD-55 BOARD (See Page 115)
CN007
CN005
CN001
M904 LOADING MOTOR
CN004
CN006
CN001
M903 CAM MOTOR
CA-41 BOARD (See Page 117)
CN201
CN202
CN602
CN601
CN603
CN602
AF SW PLS
AF REC P
A MUTE
HIFI MIX
AF PB
LP/SP
AUDIO (HF-22)
CN105
RF SWP
V REC
REC P
Q VD
V PB
HEAD SEL
LP HEAD
SKEW ON
COLOR CONT
EDIT
AMS
LP/SP
VIDEO (MA-138, RP-63)
CN104
COSMO CS
S CLK
SI BUS
SO BUS
COSMO RESET
VPS CS
VPS RESET
CG CS
TIMER/TUNER CONTROL (MF-162)
CN103
H DET
CN206
TUNER (MA-138) TUNER VIDEO
MD-55 BOARD (See Page 115)
IC002 (1/2) AMP
Q002 SUPPLY END SENSOR
Q001 TAKE-UP END SENSOR
UNSW 5V
CN004
D001 TAPE TOP END
IC002 (2/2) AMP
PH001 SUPPLY REEL SENSOR
PH002 TAKE-UP REEL SENSOR
S001 CASSETTE UP/DOWN
S002 REC PROOF
SI
CN003
ROTARY SWITCH
OS-13 BOARD (See Page 107)
RV451 AFC
IC402 AFC
V SEP
IC401 OSD
31 VERT
30 HOR
CB 20
RS 19
28 OSC
29 OSC 1
RS IN 17
CB IN 16
X401 17.7MHz
4 OSC 1
5 OSC 2
CT401 CHARACTER POSITION
RESET 3
S CLK 2
S IN 8
CG CS 7
13 VIN
V OUT 12
VIDEO OUT (MA-138)
Q470
VIDEO IN (MA-138)
Q403, 404
Q406, 407
H DET
Q408, 409
CN402
CN442
A8
A10
B10
A9
A7
SLV-625VP
SS-147 BOARD (See Page 106)
IC302 VPS CONTROL
CN301
31 S CLK
29 SI
30 SO
36 CS
20 RESET
SCL 25
SDA 26
DAVN 37
IC301 VPS DATA DECODER
2 SCL
3 SDA
6 DAVN
13 VIDEO IN

3-6. SERVO/SYSTEM CONTROL
—MICROCOMPUTER PIN FUNCTION(MA-138 BOARD IC101 CXP80624)

Pin No.	Port Name	I/0	Signal Name	Function
1	PB5/PP013	0	RF SW PLS	RF switching pulse
2	PB4/PP012	0	Q VD	Quasi VD signal
3	PB3/PP011	0	Q HD ENABL	Quasi HD signal
4	PB2/PP010	0	AF REC P	HiFi audio recording control signal
5	PB1/PP09	0	REC P	Video recording control signal
6	PB0/PP08	0		No connect
7	PC7/RT07	0	REC CTL	REC CTL output
8	PC6/RT06	0	COLOR CONT	Color control while JOG
9	PC5/RT05	0	NA REC P	Normal audio recording control signal
10	PC4/RT04	I	MIC SW	Microphone ON/OFF input
11	PC3/RT03	0	CAM	Cam motor select signal
12	PC2/PP018	0	CW/CCW	Rotation direction set signal
13	PC1/PP017	0	LOAD	Loading motor select signal
14	PC0/PP016	0	AF SW PLS	HiFi audio head switching pulse
15	PJ7			No connect
16	PJ6			No connect
17	PJ5	I	REC PROOF	REC PROOF switch input
18	PJ4	I	C UP/DOWN	Cassette UP/DOWN switch input
19	PJ3	0	V REC 2	"H" in REC mode
20	PJ2	0	V MUTE	Video mute signal output
21	PJ1	I	T SENS	Tape TOP sensor input
22	PJ0	I	S SENS	Tape END sensor input
23	PD7	0	TV/VTR	TV/VTR selection
24	PD6	0	STEP	"H" in forword SLOW mode
25	PD5	0	AMS	Auto head change mode selection
26	PD4	0	NA MUTE	"L" output
27	PD3	0	HIFI MIX	"H" in HiFi audio MIX mode
28	PD2	0	CTL REC	CTL recording inhibition signal
29	PD1	0	MONI(R)	Audio monitor Rch output control
30	PD0	0	MONI(L)	Audio monitor Lch output control
31	PH7			No connect
32	PH6			No connect
33	PH5			No connect
34	PH4			No connect
35	PH3	0	STEP PULSE	Step pulse output
36	PH2	0	FULL ERASE	Full erase ON
37	PH1			No connect
38	PH0	0	A MUTE	Audio mute signal output
39	MP	I	MP	Microprocessor mode input("L" always set)
40	RESET	I	COSMO RESET	Reset input
41	Vss		Vss	GND
42	XTAL		XTAL	System clock 12MHz crystal
43	EXTAL		EXTAL	System clock
44	CS0	I	COSMO CS	Serial line select signal
45	SI0	I	SI BUS	Serial data from TUNER/TIMER microcomputer
46	SO0	0	SO BUS	Serial data to TUNER/TIMER microcomputer
47	SCK0	I	S CLK	Serial clock
48	PF7/AN11	I	METER(L)	Level meter Lch data
49	PF6/AN10	I	METER(R)	Level meter Rch data
50	PF5/AN9	I		No connect

Pin No.	Port Name	I/O	Signal Name	Functon
51	PF4/AN8	I	AF SW POSI	AF switching position adjustment
52	AVss		AVss	A/D converter GND
53	AVref		AVref	A/D converter reference voltage input
54	AVdd		AVdd	A/D converter positive power supply terminal
55	PF3/AN7	I	MODE4	MD encoder data BIT4
56	PF2/AN6	I	MODE3	MD encoder data BIT3
57	PF1/AN5	I	MODE2	MD encoder data BIT2
58	PF0/AN4	I	MODE1	MD encoder data BIT1
59	AN3	I	CAP V	Capstan constant voltage FB input
60	AN2	I	V RF ENVLP	Video RF envelope input for auto tracking
61	AN1	I	AF ENVLP	HiFi audio RF envelope input for auto tracking
62	AN0	I	SW POSI	Video switching position adjustment
63	PG7/EX11	I	S REEL	S reel FG input
64	PG6/EX10	I	T REEL	T reel FG input
65	PG5/SYNC1	I	DEW	"H" (DEW sensor input)
66	PG4/SYNC0	I	C.SYNC	Composite sync input
67	PG3/PBCTL	I	PB CTL	PB CTL input
68	PG2/DPG	I	DRUM PG	Drum PG input
69	PG1/DFG	I	DRUM FG	Drum FG input
70	PG0/CFG	I	CAP FG	Capstan FG input
71	PE7/DAB1	O	CAP STOP	Capstan stop control
72	PE6/DAB0	O	CAP REV	Capstan inversion
73	PE5/DAA1	O	CAP D/A	Capstan D/A output
74	PE4/DAA0	O	DRUM D/A	Drum D/A output
75	PE3/PWM1	O	SKEW ON	Skew control while JOG
76	PE2/PWM0			No connect
77	PE1/EC/INT	I	VD CTL	CTL input for H.M.S. counter
78	PE0/INT0			No connect
79	PI7/SI1	I	SI(INDEX)	Serial data from INDEX microcomputer
80	PI6/SO1	O	SO(INDEX)	Serial data to INDEX microcomputer
81	PI5/SCK1	O	SCK(INDEX)	Serial clock
82	PI4/INT1	O	INDEX CS	INDEX microcomputer chip select signal
83	PI3/TO	O	LINE1	Input control 1
84	PI2/PWM	O	LINE2	Input control 2
85	PI1/PO	O	LAMP	End sensor lamp signal
86	PI0/PCK	I		No connect
87	PK0	I		No connect
88	Vss		Vss	GND
89	Vdd		Vdd	Positive power supply terminal
90	N.C.			No connect
91	PA7/PP07	O	LP/SP	"L" in SP mode
92	PA6/PP06			No connect
93	PA5/PP05	O	LP HEAD	LP head select signal
94	PA4/PP04	O	EDIT	"H" during EDIT
95	PA3/PP03	O	NA PB	Normal audio PB control
96	PA2/PP02	O	AF PB	HiFi audio PB control
97	PA1/PP01	O	JOG	"L" in variable speed mode
98	PA0/PP00	O	V PB	"L" in PB mode
99	PB7/PP015	O	HEAD SEL	Head select signal
100	PB6/PP014	O	OSD Q VD	No connect

3-7. SYSTEM CONTROL-VIDEO BLOCK INTERFACE

Signal Name	Pin No.	I/O	STOP/FF/REW	TAPE LOADING	TAPE UNLOADING	PB	PB·PAUSE	SLOW	x2	CUE	REVIEW	REC	REC·PAUSE	−x1	−x2
$\overline{\text{V PB}}$	MA-138 BOARD IC101 (98)	O	H	H	H	L	L	L	L	L	L	H	H	L	L
HEAD SEL	MA-138 BOARD IC101 (99)	O	L	L	L	L	H	*1	H	L	L	H	H	L	H
RF SW P	MA-138 BOARD IC101 ①	O	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2
Q VD	MA-138 BOARD IC101 ②	O	L	L	L	L	*4	*4	*4	*4	*4	L	L	*4	*4
EDIT	MA-138 BOARD IC101 (94)	O	L	L	L	*5	*5	*5	*5	*5	*5	*5	L	*5	*5
AMS	MA-138 BOARD IC101 ㉕	O	L	L	L	L	L	*6	L	*7	*7	L	L	*7	*7
$\overline{\text{SP}}$/LP	MA-138 BOARD IC101 (91)	O	*8	*8	*8	*9	*9	*9	*9	*9	*9	*8	*8	*9	*9
LP HEAD	MA-138 BOARD IC101 (93)	O	*8	*8	*8	*9	L	L	L	L	L	*8	*8	L	L
REC/$\overline{\text{P}}$	MA-138 BRARD IC101 ⑤	O	L	L	L	L	L	L	L	L	L	H	L	L	L
VREC2	MA-138 BOARD IC101 ⑲	O	L	L	L	L	L	L	L	L	L	H	L	L	L
COMP SYNC	MA-138 BOARD IC101 (66)	I	*10	*10	*10	*10	*10	*10	*10	*10	*10	*10	*10	*10	*10

*1. "H" when the tape stops, and "L" when it runs (for approx. 40 msec).

*2. Synchronized with drum rotation. 25 Hz 50% duty pulse.

*4. V-cycle "H" pulse.

*5. Normally "L". "H" during EDIT mode.

*6. "H" when the tape runs reverse during SP mode "L" the other conditions.

*7. "H" during SP mode, or "L" during LP mode.

*8. By SP/LP selector, "L" during SP mode, or "H" during LP mode.

*9. By the mode on the recorded tape, "L" when it is SP mode, or "H" when "LP" mode.

*10. Composite sync. signal (positive polarity).

3-8. SYSTEM CONTROL–SERVO PERIPHERAL CIRCUIT INTERFACE

Signal Name	Pin No.	I/O	STOP	FF	REW	TAPE LOADING	TAPE UNLOADING	PB	PB• PAUSE	SLOW	× 2	CUE	REVIEW	REC	REC• PAUSE
REC CTL *1	MA-138 BOARD IC101 ⑦	O	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1
CAP STOP	MA-138 BOARD IC101 (71)	O	H	L	L	L	L	L	H	H	L	L	L	L	H
$\overline{\text{STEP PLS}}$	MA-138 BOARD IC101 ㉟	O	H	H	H	H	H	H	H	*2	H	H	H	H	H
CAP V *3	MA-138 BOARD IC101 (59)	I													
SW POSITION *4	MA-138 BOARD IC101 (62)	I													
$\overline{\text{PB CTL}}$	MA-138 BOARD IC101 (67)	I	H	*6	*6			*1	H/L	*2	*6	*6	*6	*1	H
VD CTL	MA-138 BOARD IC101 (77)	I	H	*6	*6			*1	H	*2	*6	*6	*6	*1	H
DRUM PG	MA-138 BOARD IC101 ㊽	I	L	L	L	*5	*5	*7	*7	*7	*7	*7	*7	*7	*7
DRUM FG	MA-138 BOARD IC101 (69)	I	L	L	L	*5	*5	*8	*8	*8	*8	*8	*8	*8	*8
CAP FG	MA-138 BOARD IC101 (70)	I	H/L	*6	*6	*5	*5	*6	H/L	*9	*6	*6	*6	*6	H/L
INDEX $\overline{\text{CS}}$	MA-138 BOARD IC101 (82)	O							*10						
CAP RVS	MA-138 BOARD IC101 (72)	O	H	L	H	L	H	L	L	*2	L	L	H	L	L
CAP DA *14	MA-138 BOARD IC101 (73)	O	*11	L	L	*11	*11	*12	*11	*11	*12	*12	*12	*12	*11
DRUM DA *14	MA-138 BOARD IC101 (74)	O	*13	*13	*13	*13	*13	*13	*13	*13	*13	*13	*13	*13	*13
REC•$\overline{\text{P}}$	MA-138 BOARD IC101 ⑤	O	L	L	L	L	L	L	L	L	L	L	L	H	L

*1. 25 Hz pulse.

*2. "L"pulse when the tape runs.

*3. Input terminal for capstan constant-voltage drive.
Used in the FF/REW mode and for cassette loading/unloading.

*4. Input terminal for switching position adjustment.

*5. Indefinite cycle pulse.

*6. Cycle pulse proportional to a tape speed.

*7. 25 Hz "H" pulse.

*8. 300 Hz pulse.

*9. Tape run time pulse.

*10. V-cycle "L" pulse.

*11. "H" or "L" pulse in a cycle of approx. 2 msec.

*12. "H" or "L" pulse in a cycle of approx. 1.5 msec.

*13. "H" or "L" pulse in a cycle of approx. 3 msec.

*14. 3-value output of "H", "L" and HI-Z (2.5V).

3-9. SYSTEM CONTROL–MECHANISM BLOCK INTERFACE

Signal Name	Pin No.	I/O	HI-SPEED REW	EJECTED	CASSETTE LOADING	CASSETTE UNLOADING	TAPE LOADING	TAPE UNLOADING	STOP	FF	REW	PB	PB· PAUSE	SLOW	×2	CUE	REVIEW	REC	REC PAUSE
CAM *1	MA-138 BOARD IC101 ⑪	O	L	L	L	L	H	H	L	L	L	L	L	L	L	L	L	L	L
LOAD	MA-138 BOARD IC101 ⑬	O	L	L	H	H	L	L	L	L	L	L	L	L	L	L	L	L	L
CW/$\overline{\text{CCW}}$	MA-138 BOARD IC101 ⑫	O			H	L	H	L											
MODE 1	MA-138 BOARD IC101 (58)	I	H	L	L	L	H	H	L	H	H	H	L	L	H	H	H	H	H
MODE2	MA-138 BOARD IC101 (57)	I	L	H	H	H	H	H	L	L	L	L	H	H	L	L	L	L	H
MODE 3	MA-138 BOARD IC101 (56)	I	H	H	H	H	L	L	L	L	L	H	H	H	H	H	L	H	H
MODE 4	MA-138 BOARD IC101 (55)	I	H	H	H	H	H	H	L	H	H	L	L	L	L	L	L	L	L
REC PRF	MA-138 BOARD IC101 ⑰	I	*2	L	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2
C-UP/$\overline{\text{DOWN}}$	MA-138 BOARD IC101 ⑱	I	L	H	H→L	H→L	L	L	L	L	L	L	L	L	L	L	L	L	L
T REEL	MA-138 BOARD IC101 (64)	I	*3	H/L	H/L	H/L	H/L	H/L	H/L	*3	*3	*3	H/L	*3	*3	*3	*3	*3	H/L
S REEL	MA-138 BOARD IC101 (63)	I	*3	H/L	H/L	H/L	*3	*3	H/L	*3	*3	*3	H/L	*3	*3	*3	*3	*3	H/L
LAMP	MA-138 BOARD IC101 (85)	O	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4
T SENS	MA-138 BOARD IC101 ㉑	I	*7	*4	*4	*4	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7
S SENS	MA-138 BOARD IC101 ㉒	I	*7	*4	*4	*4	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7

*1. "H" when progressing to the MECHA mode.

*2. "L" when a cassette erasure preventive finger is bent, and "H" when not bent.

*3. Cycle pulse proportional to a reel speed.

*4. "H" pulse in a cycle of approx. 2 msec.

*7. Narmally "L", "H" pulse in a cycle of 2 msec. when tape top or tape end is detected.

*8. 3-value output of "H", "L" and HI-Z (2.5V).

3-10. SYSTEM CONTROL–SYSTEM CONTROL PERIPHERAL CIRCUIT INTERFACE

Signal Name	Pin No.	I/O	I/O LEVEL
$\overline{\text{RESET}}$	MA-138 BOARD IC101 ㊵	I	Normally "H". Set to "L" when a power failure is delected or power is restored.
$\overline{\text{COSMO CS}}$	MA-138 BOARD IC101 ㊹	I	Chip select signal from the timer microcomputer (MF-162 board IC301). V-cycle "L" pulse.
SI BUS	MA-138 BOARD IC101 ㊺	I	Serial communication data from the timer microcomputer. V-cycle "L" pulse.
SO BUS	MA-138 BOARD IC101 ㊻	O	Serial communication data to the timer microcomputer. V-cycle "L" pulse.
$\overline{\text{S CLK}}$	MA-138 BOARD IC101 ㊼	I	Serial communication clock to the timer microcomputer. V-cycle "L" pulse.
S IN 1	MA-138 BOARD IC101 (79)	I	Serial communication data from the INDEX IC (IC102). V-cycle "L" pulse.
S OUT 1	MA-138 BOARD IC101 (80)	O	Serial communication data to the INDEX IC. V-cycle "L" pulse.
S CLK 1	MA-138 BOARD IC101 (81)	O	Serial communication clock to the INDEX IC. V-cycle "L" pulse.
$\overline{\text{CS INDEX}}$	MA-138 BOARD IC101 (82)	O	Chip select signal to the INDEX IC (IC102). V-cycle "L" pulse.

3-11. SYSTEM CONTROL–AUDIO BLOCK INTERFACE

Signal Name	Pin No.	I/O	STOP/ FF/REW	TAPE LOADING	TAPE UNLOADING	PB	PB• PAUSE	SLOW	×2	CUE	REVIEW	REC	REC PAUSE	−×1	−×2
NA•PB	MA-138 BOARD IC101 (95)	O	L	L	L	H	H	H	H	H	H	L	L		
A MUTE	MA-138 BOARD IC101 ㊳	O	L	L	L	*1	H	H	H	H	H	L	L	H	H
$\overline{\text{SP}}$/LP	MA-138 BOARD IC101 (91)	O	*2	*2	*2	*3	*3	*3	*3	*3	*3	*2	*2	L	*3
AF REC/$\overline{\text{P}}$	MA-138 BOARD IC101 ④	O	L	L	L	L	L	L	L	L	L	H	L	H	L
$\overline{\text{AF PB}}$	MA-138 BOARD IC101 (96)	O	H	H	H	L	L	L	L	L	L	H	H	L	L
AF SWP	MA-138 BOARD IC101 ⑭	O	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4

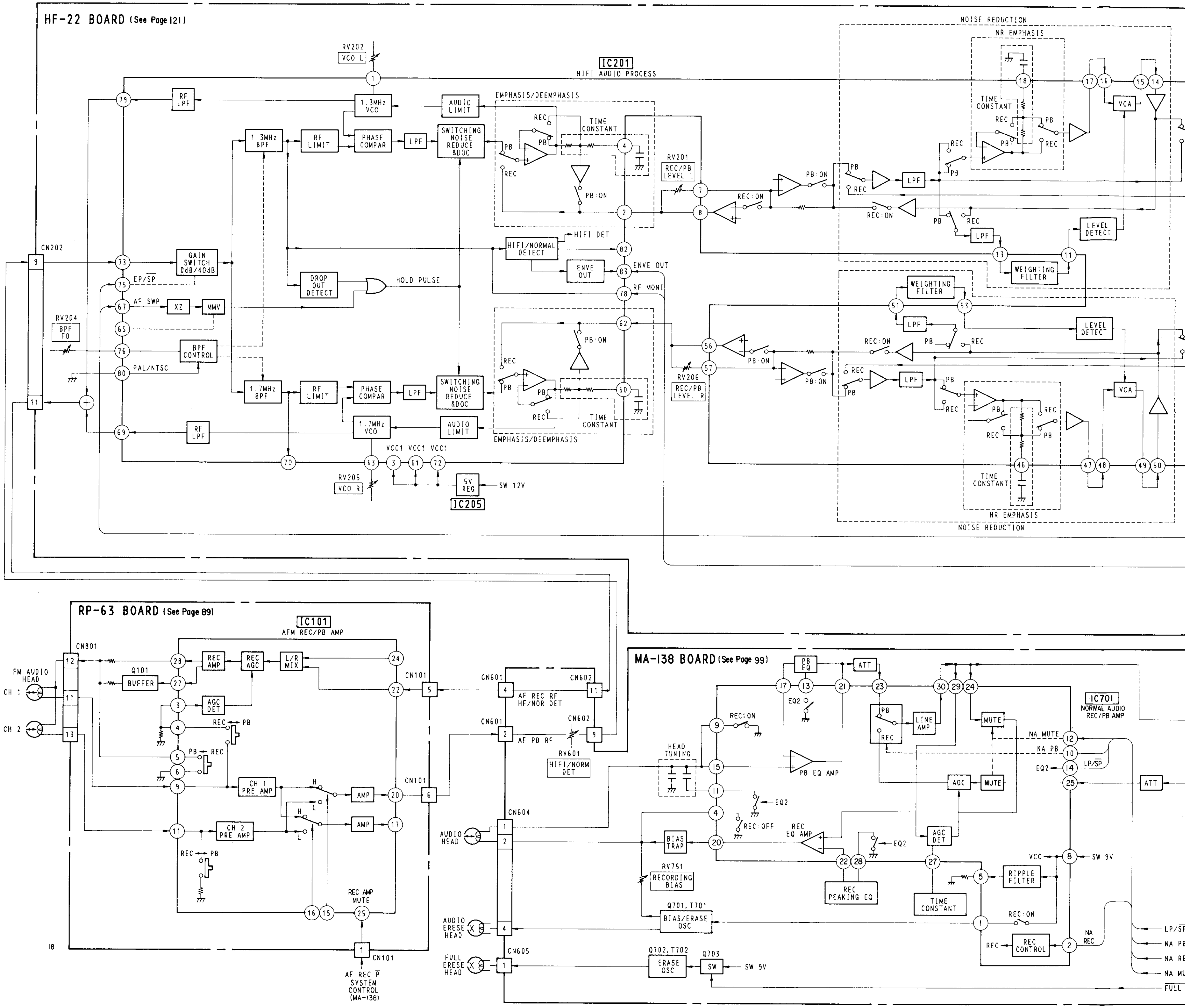
*1. "H" when CTL signal is not played back.

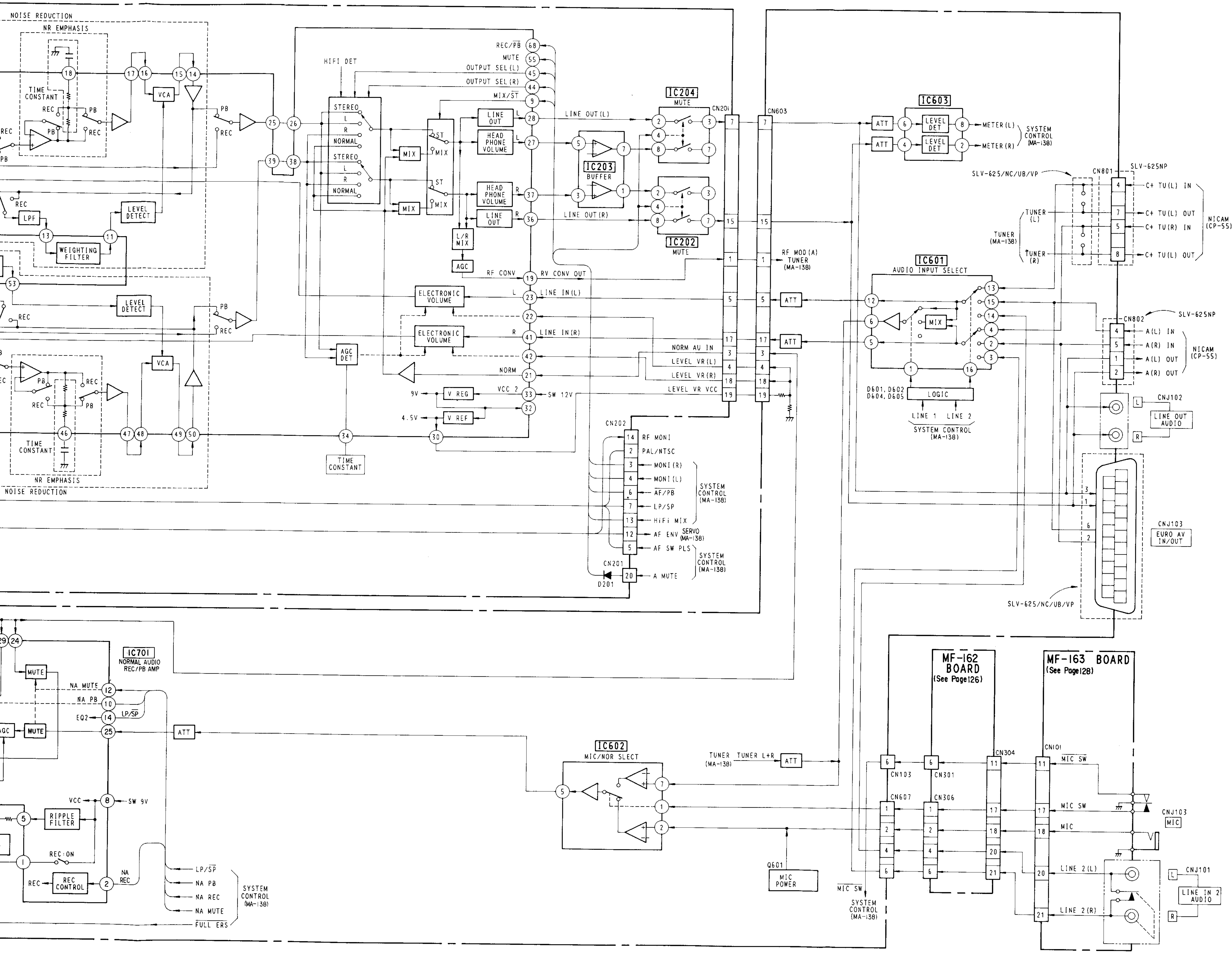
*2. By SP/LP selector, "L" during SP mode, or "H" during LP mode.

*3. By the mode on the recorded tape, "L" when it is SP mode, or "H" when "LP" mode.

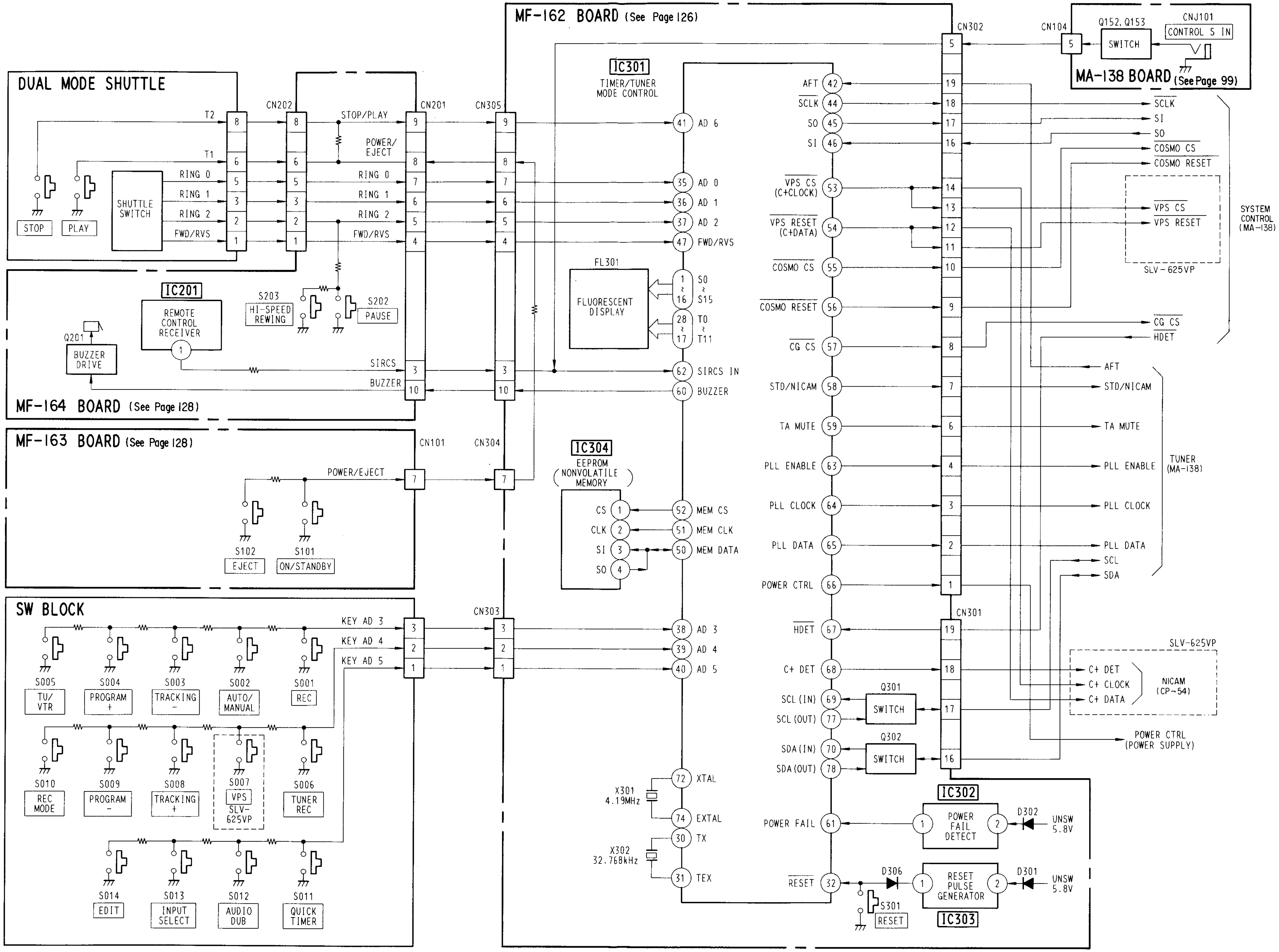
*4. Synchronized with drum rotation. 25Hz 50%duty pulse.

3-12. AUDIO BLOCK DIAGRAM


HF-22 BOARD (See Page 121)
IC201
HIFI AUDIO PROCESS
RV202 VCO L
RF LPF
1.3MHz VCO
AUDIO LIMIT
EMPHASIS/DEEMPHASIS
1.3MHz BPF
RF LIMIT
PHASE COMPAR
LPF
SWITCHING NOISE REDUCE &DOC
TIME CONSTANT
RV201 REC/PB LEVEL L
NOISE REDUCTION
NR EMPHASIS
VCA
LEVEL DETECT
WEIGHTING FILTER
CN202
GAIN SWITCH 0dB/40dB
EP/SP
AF SWP
XZ
MMV
DROP OUT DETECT
HOLD PULSE
HIFI/NORMAL DETECT
HIFI DET
ENVE OUT
RF MONI
RV204 BPF F0
BPF CONTROL
PAL/NTSC
1.7MHz BPF
1.7MHz VCO
RV206 REC/PB LEVEL R
VCC1 VCC1 VCC1
RV205 VCO R
5V REG
IC205
SW 12V
PB ON
REC ON
RP-63 BOARD (See Page 89)
IC101
AFM REC/PB AMP
CN801
FM AUDIO HEAD
CH 1
CH 2
Q101 BUFFER
REC AMP
REC AGC
L/R MIX
AGC DET
CH 1 PRE AMP
CH 2 PRE AMP
AMP
REC AMP MUTE
CN101
AF REC P SYSTEM CONTROL (MA-138)
CN601
CN602
AF REC RF HF/NOR DET
AF PB RF
RV601 HIFI/NORM DET
CN604
AUDIO HEAD
AUDIO ERESE HEAD
CN605
FULL ERESE HEAD
MA-138 BOARD (See Page 99)
PB EQ
ATT
EQ2
REC ON
LINE AMP
MUTE
IC701
NORMAL AUDIO REC/PB AMP
NA MUTE
NA PB
LP/SP
HEAD TUNING
PB EQ AMP
REC OFF
REC EQ AMP
AGC
AGC DET
BIAS TRAP
RV751 RECORDING BIAS
REC PEAKING EQ
TIME CONSTANT
RIPPLE FILTER
VCC
SW 9V
Q701, T701 BIAS/ERASE OSC
REC CONTROL
NA REC
Q702, T702 ERASE OSC
Q703 SW
FULL


NOISE REDUCTION
NR EMPHASIS
TIME CONSTANT
REC
PB
VCA
LPF
LEVEL DETECT
WEIGHTING FILTER
TIME CONSTANT
NR EMPHASIS
NOISE REDUCTION
HIFI DET
REC/PB
MUTE
OUTPUT SEL(L)
OUTPUT SEL(R)
MIX/ST
STEREO
L
R
NORMAL
MIX
ST
LINE OUT
HEAD PHONE VOLUME
L/R MIX
AGC
RF CONV
RV CONV OUT
ELECTRONIC VOLUME
LINE IN(L)
LINE IN(R)
AGC DET
NORM
9V
V REG
VCC 2
SW 12V
4.5V
V REF
TIME CONSTANT
LINE OUT(L)
LINE OUT(R)
IC204
MUTE
IC203
BUFFER
IC202
MUTE
CN201
CN202
14 RF MONI
2 PAL/NTSC
3 MONI(R)
4 MONI(L)
6 AF/PB
7 LP/SP
13 HiFi MIX
12 AF ENV
5 AF SW PLS
SYSTEM CONTROL (MA-138)
SERVO (MA-138)
CN201
20 A MUTE
D201
NORM AU IN
LEVEL VR(L)
LEVEL VR(R)
LEVEL VR VCC
CN603
RF MOD(A) TUNER (MA-138)
ATT
IC603
LEVEL DET
METER(L)
METER(R)
SYSTEM CONTROL (MA-138)
SLV-625/NC/UB/VP
CN801
SLV-625NP
C+ TU(L) IN
C+ TU(L) OUT
C+ TU(R) IN
NICAM (CP-55)
TUNER (L)
TUNER (MA-138)
TUNER (R)
IC601
AUDIO INPUT SELECT
D601, D602
D604, D605
LOGIC
LINE 1
LINE 2
SYSTEM CONTROL (MA-138)
CN802
SLV-625NP
A(L) IN
A(R) IN
A(L) OUT
A(R) OUT
NICAM (CP-55)
CNJ102
LINE OUT AUDIO
CNJ103
EURO AV IN/OUT
SLV-625/NC/UB/VP
IC701
NORMAL AUDIO REC/PB AMP
MUTE
NA MUTE
NA PB
EQ2
LP/SP
AGC
ATT
VCC
SW 9V
RIPPLE FILTER
REC ON
REC
REC CONTROL
NA REC
LP/SP
NA PB
NA REC
NA MUTE
FULL ERS
SYSTEM CONTROL (MA-138)
IC602
MIC/NOR SLECT
Q601
MIC POWER
TUNER (MA-138)
TUNER L+R
MIC SW
SYSTEM CONTROL (MA-138)
CN103
CN607
MF-162 BOARD (See Page126)
CN301
CN306
CN304
MF-163 BOARD (See Page128)
CN101
MIC SW
MIC
CNJ103
MIC
LINE 2(L)
LINE 2(R)
CNJ101
LINE IN 2 AUDIO

3-13. TIMER/TUNER/MODE CONTROL BLOCK DIAGRAM



DUAL MODE SHUTTLE
T2
T1
RING 0
RING 1
RING 2
FWD/RVS
SHUTTLE SWITCH
STOP
PLAY
CN202
STOP/PLAY
POWER/ EJECT
CN201
CN305
MF-164 BOARD (See Page 128)
IC201
REMOTE CONTROL RECEIVER
Q201
BUZZER DRIVE
S203
HI-SPEED REWING
S202
PAUSE
SIRCS
BUZZER
MF-163 BOARD (See Page 128)
CN101
CN304
POWER/EJECT
S102
EJECT
S101
ON/STANDBY
SW BLOCK
KEY AD 3
KEY AD 4
KEY AD 5
CN303
S005
TU/ VTR
S004
PROGRAM +
S003
TRACKING -
S002
AUTO/ MANUAL
S001
REC
S010
REC MODE
S009
PROGRAM -
S008
TRACKING +
S007
VPS
SLV-625VP
S006
TUNER REC
S014
EDIT
S013
INPUT SELECT
S012
AUDIO DUB
S011
QUICK TIMER
MF-162 BOARD (See Page 126)
IC301
TIMER/TUNER MODE CONTROL
AD 6
AD 0
AD 1
AD 2
FWD/RVS
FL301
FLUORESCENT DISPLAY
S0 ~ S15
T0 ~ T11
SIRCS IN
BUZZER
IC304
EEPROM (NONVOLATILE MEMORY)
CS
CLK
SI
SO
MEM CS
MEM CLK
MEM DATA
AD 3
AD 4
AD 5
X301 4.19MHz
XTAL
EXTAL
X302 32.768kHz
TX
TEX
AFT
SCLK
SO
SI
VPS CS (C+CLOCK)
VPS RESET (C+DATA)
COSMO CS
COSMO RESET
CG CS
STD/NICAM
TA MUTE
PLL ENABLE
PLL CLOCK
PLL DATA
POWER CTRL
HDET
C+ DET
SCL (IN)
SCL (OUT)
SDA (IN)
SDA (OUT)
Q301
SWITCH
Q302
SWITCH
POWER FAIL
RESET
IC302
POWER FAIL DETECT
D302
UNSW 5.8V
D306
IC303
RESET PULSE GENERATOR
D301
UNSW 5.8V
S301
RESET
CN302
CN301
CN104
Q152, Q153
SWITCH
CNJ101
CONTROL S IN
MA-138 BOARD (See Page 99)
SCLK
SI
SO
COSMO CS
COSMO RESET
VPS CS
VPS RESET
SLV-625VP
SYSTEM CONTROL (MA-138)
CG CS
HDET
AFT
STD/NICAM
TA MUTE
PLL ENABLE
PLL CLOCK
PLL DATA
SCL
SDA
TUNER (MA-138)
SLV-625VP
C+ DET
C+ CLOCK
C+ DATA
NICAM (CP-54)
POWER CTRL (POWER SUPPLY)

3-14. TIMER/MOD

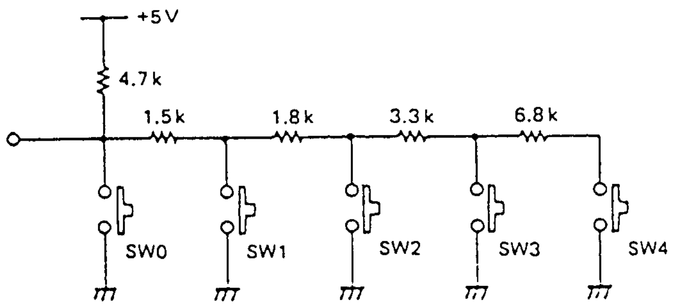
Pin No.	Port Name
1	S4
2	S5
3	S6
4	S7
5	S8
6	S9
7	S10
8	S11
9	S12
10	S13
11	S14
12	S15
13	S16
14	S17
15	S18
16	S19
17	T11
18	T10
19	T9
20	T8
21	T7
22	T6
23	T5
24	T4
25	T3
26	T2
27	T1
28	T0
29	INT
30	TX
31	TEX
32	$\overline{\text{RESET}}$
33	
34	V_{DD}
35	AD 0
36	AD 1
37	AD 2
38	AD 3
39	AD 4
40	AD 5
41	AD 6
42	AD 7
43	$\overline{\text{EC}}$
44	$\overline{\text{SC}}$
45	SO
46	SI
47	PA 0
48	PA 1
49	PA 2

3-14. TIMER/MODE CONTROL — MICROCOMPUTER PIN FUNCTION (CXP50116 : IC301 on MF-162 Board)

Pin No.	Port Name	I/O	Signal name	Function
1	S4	O	S0	FIP segment signal
2	S5	O	S1	
3	S6	O	S2	
4	S7	O	S3	
5	S8	O	S4	
6	S9	O	S5	
7	S10	O	S6	
8	S11	O	S7	
9	S12	O	S8	
10	S13	O	S9	
11	S14	O	S10	
12	S15	O	S11	
13	S16	O	S12	
14	S17	O	S13	
15	S18	O	S14	
16	S19	O	S15	
17	T11	O	T11	FIP grid signal
18	T10	O	T10	
19	T9	O	T9	
20	T8	O	T8	
21	T7	O	T7	
22	T6	O	T6	
23	T5	O	T5	
24	T4	O	T4	
25	T3	O	T3	
26	T2	O	T2	
27	T1	O	T1	
28	T0	O	T0	
29	INT	I	INT	Interruption from externals (Not Used)
30	TX	O	TX	Backup clock output
31	TEX	I	TEX	Backup clock input (32.768 kHz)
32	$\overline{\text{RESET}}$	I	$\overline{\text{RESET}}$	Reset input
33			V_{DD}	
34	V_{DD}	–	V_{DD}	Positive power supply terminal
35	AD 0	I	AD 0	Key input reading A/D (including shuttle switch)
36	AD 1	I	AD 1	
37	AD 2	I	AD 2	
38	AD 3	I	AD 3	
39	AD 4	I	AD 4	
40	AD 5	I	AD 5	
41	AD 6	I	AD 6	
42	AD 7	I	AFT	Tuner AFT signal
43	$\overline{\text{EC}}$	I	$\overline{\text{EC}}$	Event count input (Not used)
44	$\overline{\text{SC}}$	O	$\overline{\text{SCLK}}$	Serial bus clock output
45	SO	O	SO (from TT)	Serial bus SOUT
46	SI	I	SI (to TT)	Serial bus SIN
47	PA 0	I/O	FWD/RVS	Shuttle ring direction input
48	PA 1	I	N.C	Not Used
49	PA 2	I	RF MOD CTRL	Control RF MOD to operate or not
50	PA 3	I/O	MEM DATA	EEPROM data signal
51	PF 0	O	MEM CLK	EEPROM clock signal
52	PF 1	O	MEM CS	EEPROM chip select signal
53	PF 2	O	$\overline{\text{VPS CS}}$	VPS chip select signal
54	PF 3	O	$\overline{\text{VPS RESET}}$	VPS reset signal
55	PE 0	O	$\overline{\text{COSMO CS}}$	COSMO chip select signal
56	PE 1	O	$\overline{\text{COSMO RESET}}$	COSMO reset signal
57	PE 2	O	$\overline{\text{CG CS}}$	CG chip select signal
58	PE 3	O	$\overline{\text{STD}}$/NICAM	Tuner audio select signal
59	PY 0	O	TA MUTE	Tuner audio mute
60	PY 1	O	BUZZER	Buzzer signal
61	PY 2	I	POWER FAIL	Service interruption detection
62	PY 3	I	SIRCS IN	Remote control input
63	PD 0	O	PLL ENABLE	FS tuner enable output
64	PD 1	O	PLL CLOCK	FS tuner clock output
65	PD 2	O	PLL DATA	FS tuner data output
66	PD 3	O	POWER CTRL	Power control signal
67	PC 0	I	$\overline{\text{HDET}}$	H sync detection signal
68	PC 1	I	C+DET	CANAL PLUS detection signal
69	PC 2	I	SCL(IN)	I^2C input signal
70	PC 3	I	SDA(IN)	
71	V_{SS}	–	V_{SS}	GND
72	XTAL	O	XTAL	Clock output
73			V_{DD}	
74	EXTAL	I	EXTAL	Clock input (4.194304 MHz)
75	V_{REF}	I	V_{REF}	Reference voltage for resetting circuit (to V_{DD})
76	V_{FDP}	I	V_{FDP}	Power supply for FIP
77	PH 0	O	SCL(OUT)	I^2C output signal
78	PH 1	O	SDA(OUT)	
79	PH 2	O	N.C	
80	PH 3	O	N.C	

● A/D PORT ALLOCATION

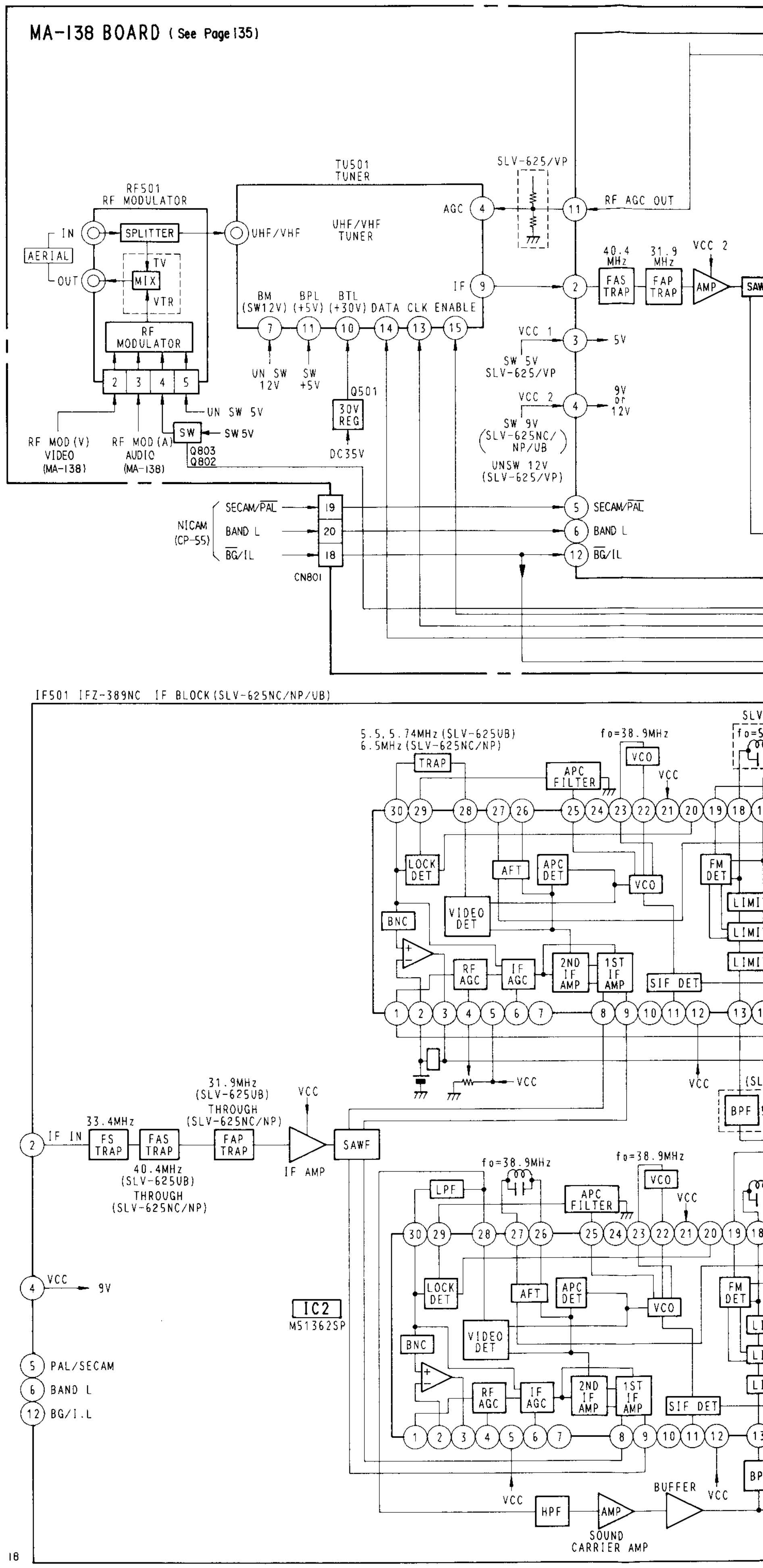
- The A/D ports are allocated as shown below.

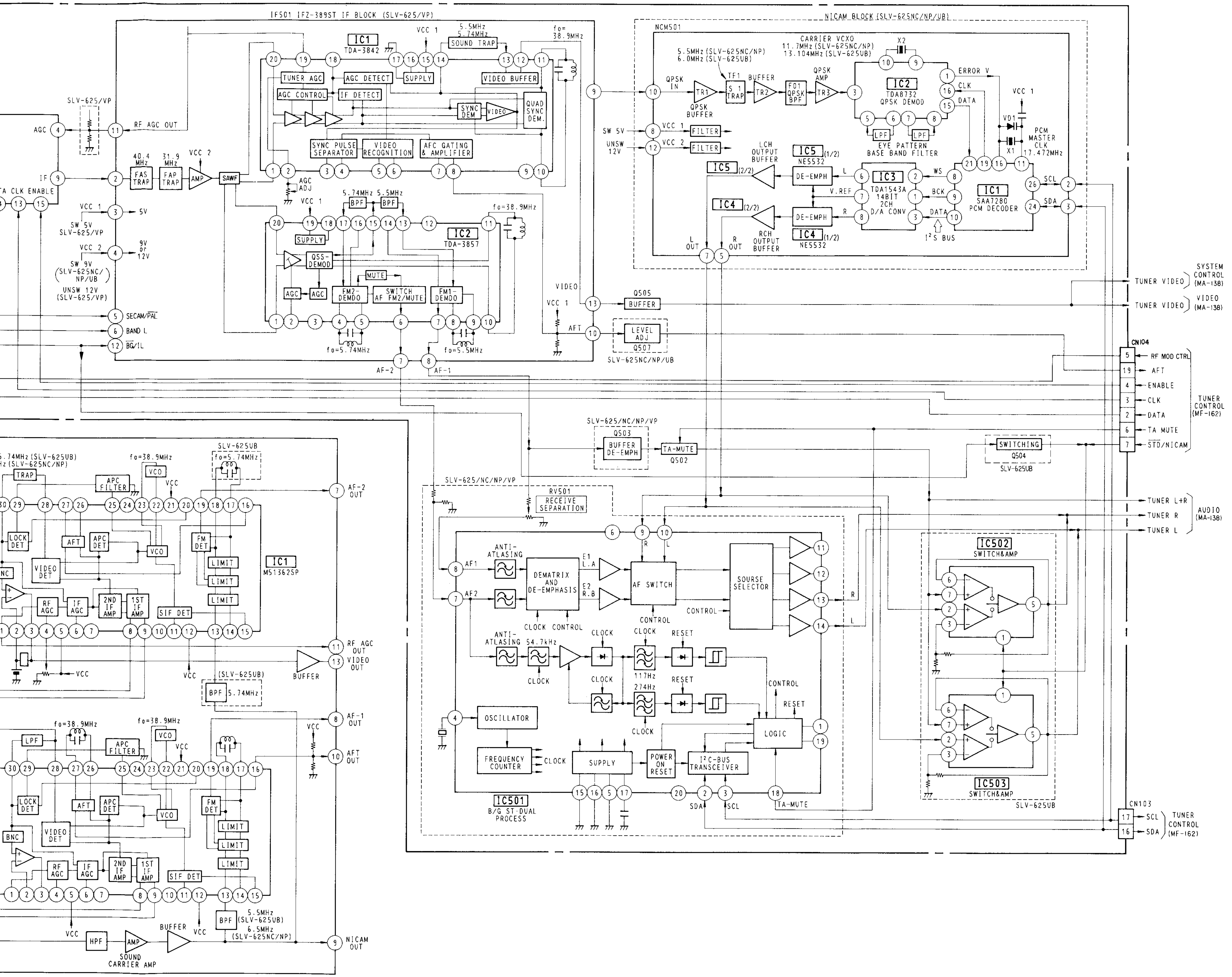

+5V
4.7k
1.5k
1.8k
3.3k
6.8k
SW0
SW1
SW2
SW3
SW4

AD \ SW	Pin No.	SW0 0.00[V]	SW1 1.21[V]	SW2 2.06[V]	SW3 2.92[V]	SW4 3.70[V]
AD 0	35	RING 0	TEST 1	TEST 2 (× 120)		
AD 1	36	RING 1	NP	NC	HK/UB	VP
AD 2	37	RING 2	PAUSE	H.S. REWIND		
AD 3	38	REC	AUTO/MANUAL	TRACKING (-)	PROGRAM (+)	TV/VTR
AD 4	39	TIMER ON/OFF	VPS	TRACKING (+)	PROGRAM (-)	
AD 5	40	QUICK TIMER		INPUT SELECT	EDIT	REC MODE
AD 6	41	STOP	PLAY	POWER	EJECT	
AD 7	42	(RESERVED)	(RESERVED)	(RESERVED)	(RESERVED)	(RESERVED)

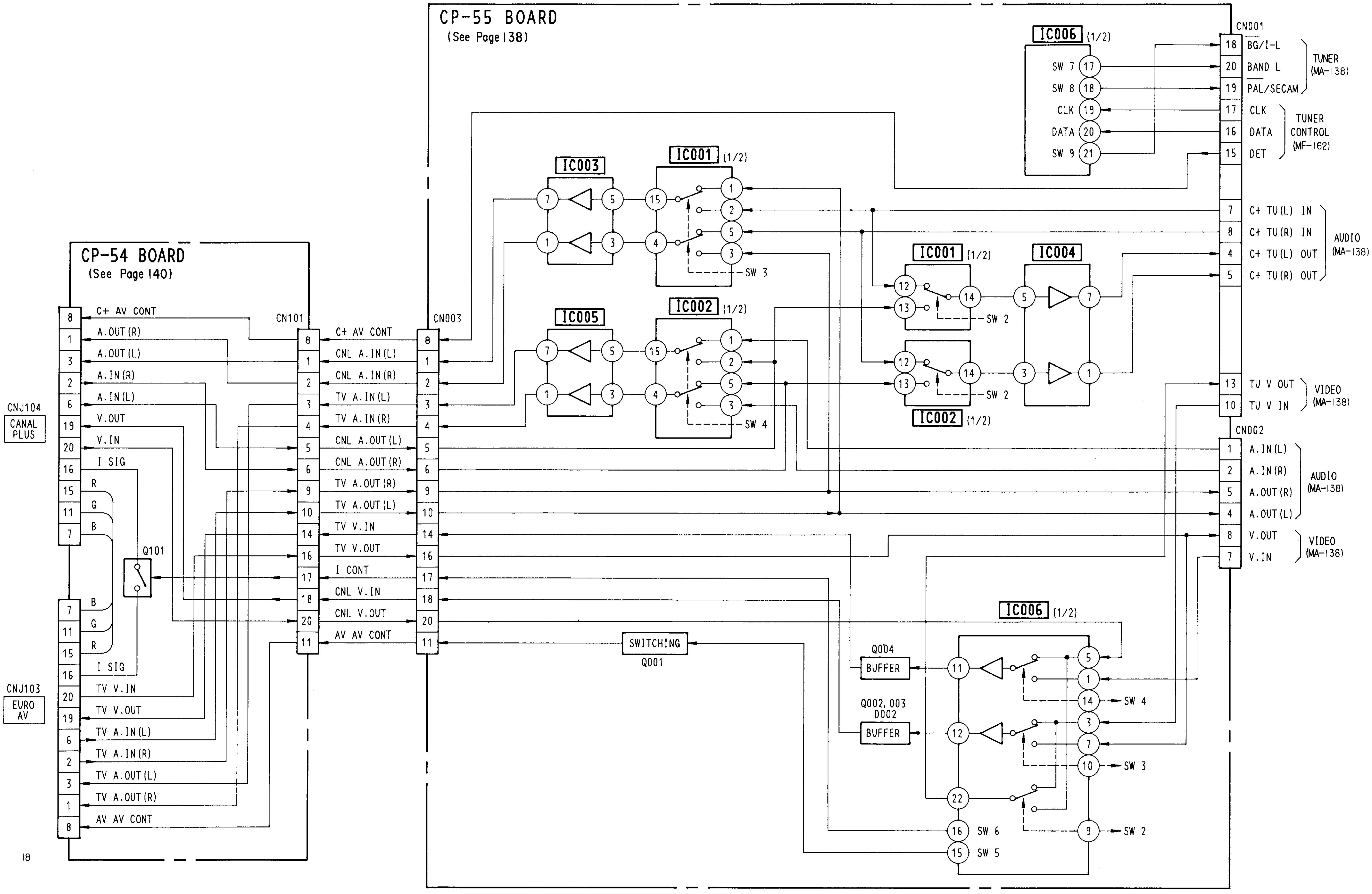
- AD7 port is AFT signal input for tuner tuning.
- KEY input signals pass through the A/D ports as shown above.
- Chattering-cancel time is 30 msec. KEY input is assumed when there are two input signals of the same voltage within 30 msec.
- Discriminate the model (SLV-625, 625NC, 625NP, 625UB, 625VP) by using the AD1 port.

3-15. TUNER BLOCK DIAGRAM

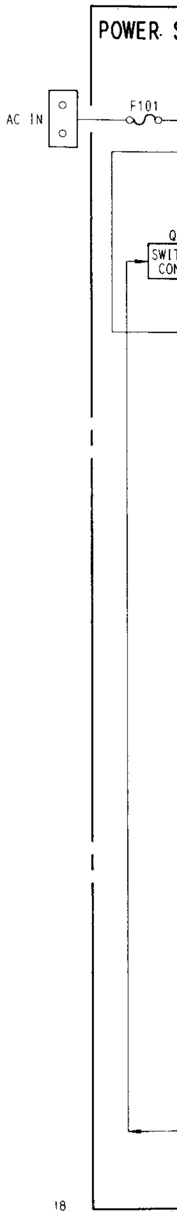

MA-138 BOARD (See Page 135)
RF501
RF MODULATOR
AERIAL
IN
OUT
SPLITTER
MIX
TV
VTR
RF MODULATOR
2
3
4
5
RF MOD (V) VIDEO (MA-138)
RF MOD (A) AUDIO (MA-138)
SW
Q803
Q802
UN SW 5V
SW 5V
TU501
TUNER
UHF/VHF
UHF/VHF TUNER
AGC
IF
BM (SW12V)
BPL (+5V)
BTL (+30V)
DATA
CLK
ENABLE
UN SW 12V
SW +5V
Q501
30V REG
DC35V
SLV-625/VP
RF AGC OUT
40.4 MHz
31.9 MHz
FAS TRAP
FAP TRAP
AMP
SAW
VCC 2
VCC 1
5V
SW 5V SLV-625/VP
9V or 12V
SW 9V (SLV-625NC/NP/UB)
UNSW 12V (SLV-625/VP)
NICAM (CP-55)
SECAM/PAL
BAND L
BG/IL
CN801
IF501 IFZ-389NC IF BLOCK (SLV-625NC/NP/UB)
5.5, 5.74MHz (SLV-625UB)
6.5MHz (SLV-625NC/NP)
TRAP
fo=38.9MHz
VCO
APC FILTER
VCC
LOCK DET
AFT
APC DET
VIDEO DET
BNC
RF AGC
IF AGC
2ND IF AMP
1ST IF AMP
SIF DET
FM DET
LIMI
BPF
IF IN
33.4MHz
FS TRAP
40.4MHz (SLV-625UB) THROUGH (SLV-625NC/NP)
31.9MHz (SLV-625UB) THROUGH (SLV-625NC/NP)
IF AMP
SAWF
LPF
IC2
M51362SP
VCC
9V
PAL/SECAM
BAND L
BG/I.L
HPF
SOUND CARRIER AMP
BUFFER
18


IF501 IFZ-389ST IF BLOCK (SLV-625/VP)
IC1
TDA-3842
VCC 1
5.5MHz
5.74MHz
SOUND TRAP
fo=
38.9MHz
TUNER AGC
AGC DETECT
SUPPLY
VIDEO BUFFER
AGC CONTROL
IF DETECT
SYNC DEM
VIDEO
QUAD SYNC DEM.
SYNC PULSE SEPARATOR
VIDEO RECOGNITION
AFC GATING & AMPLIFIER
SLV-625/VP
AGC
RF AGC OUT
IF
TA CLK ENABLE
40.4 MHz
FAS TRAP
31.9 MHz
FAP TRAP
VCC 2
AMP
SAWF
AGC ADJ
VCC 1
5V
SW 5V
SLV-625/VP
VCC 2
9V or 12V
SW 9V
(SLV-625NC/NP/UB)
UNSW 12V
(SLV-625/VP)
SECAM/PAL
BAND L
BG/1L
5.74MHz 5.5MHz
BPF
BPF
fo=38.9MHz
IC2
TDA-3857
SUPPLY
QSS-DEMOD
MUTE
AGC
AGC
FM2-DEMDO
SWITCH AF FM2/MUTE
FM1-DEMDO
fo=5.74MHz
fo=5.5MHz
AF-2
AF-1
VIDEO
VCC 1
AFT
Q505
BUFFER
LEVEL ADJ
Q507
SLV-625NC/NP/UB
NICAM BLOCK (SLV-625NC/NP/UB)
NCM501
CARRIER VCXO
11.7MHz (SLV-625NC/NP)
13.104MHz (SLV-625UB)
X2
5.5MHz (SLV-625NC/NP)
6.0MHz (SLV-625UB)
QPSK IN
TF1
BUFFER
QPSK AMP
TR1
S1 TRAP
TR2
F01 QPSK BPF
TR3
QPSK BUFFER
IC2
TDA8732
QPSK DEMOD
ERROR V
CLK
DATA
VCC 1
VD1
PCM MASTER CLK
17.472MHz
X1
LPF
LPF
EYE PATTERN BASE BAND FILTER
SW 5V
UNSW 12V
VCC 1
VCC 2
FILTER
FILTER
LCH OUTPUT BUFFER
IC5 (1/2)
NE5532
IC5 (2/2)
DE-EMPH
IC3
TDA1543A
14BIT 2CH D/A CONV
IC1
SAA7280
PCM DECODER
WS
BCK
DATA
SCL
SDA
V.REF
IC4 (2/2)
DE-EMPH
IC4 (1/2)
NE5532
RCH OUTPUT BUFFER
I²S BUS
L OUT
R OUT
L
R
SYSTEM CONTROL (MA-138)
TUNER VIDEO
TUNER VIDEO
VIDEO (MA-138)
CN104
RF MOD CTRL
AFT
ENABLE
CLK
DATA
TA MUTE
STD/NICAM
TUNER CONTROL (MF-162)
SLV-625/NC/NP/VP
Q503
BUFFER DE-EMPH
TA-MUTE
Q502
SWITCHING
Q504
SLV-625UB
TUNER L+R
TUNER R
TUNER L
AUDIO (MA-138)
SLV-625UB
fo=5.74MHz
5.74MHz (SLV-625UB)
(SLV-625NC/NP)
TRAP
fo=38.9MHz
VCO
VCC
APC FILTER
LOCK DET
AFT
APC DET
VCO
FM DET
LIMIT
LIMIT
LIMIT
IC1
M51362SP
VIDEO DET
RF AGC
IF AGC
2ND IF AMP
1ST IF AMP
SIF DET
AF-2 OUT
RF AGC OUT
VIDEO OUT
BUFFER
VCC
(SLV-625UB)
BPF 5.74MHz
AF-1 OUT
AFT OUT
fo=38.9MHz
fo=38.9MHz
LPF
APC FILTER
VCO
LOCK DET
AFT
APC DET
VCO
FM DET
LIMIT
LIMIT
LIMIT
BNC
VIDEO DET
RF AGC
IF AGC
2ND IF AMP
1ST IF AMP
SIF DET
BPF
5.5MHz (SLV-625UB)
6.5MHz (SLV-625NC/NP)
HPF
AMP
SOUND CARRIER AMP
BUFFER
NICAM OUT
SLV-625/NC/NP/VP
RV501
RECEIVE SEPARATION
AF1
AF2
ANTI-ATLASING
DEMATRIX AND DE-EMPHASIS
E1 L.A
E2 R.B
AF SWITCH
SOURSE SELECTOR
CONTROL
CONTROL
CLOCK CONTROL
ANTI-ATLASING 54.7kHz
CLOCK
CLOCK
RESET
117Hz
274Hz
CONTROL
RESET
OSCILLATOR
LOGIC
FREQUENCY COUNTER
CLOCK
SUPPLY
POWER ON RESET
I²C-BUS TRANSCEIVER
IC501
B/G ST-DUAL PROCESS
SDA
SCL
TA-MUTE
IC502
SWITCH&AMP
IC503
SWITCH&AMP
SLV-625UB
CN103
SCL
SDA
TUNER CONTROL (MF-162)

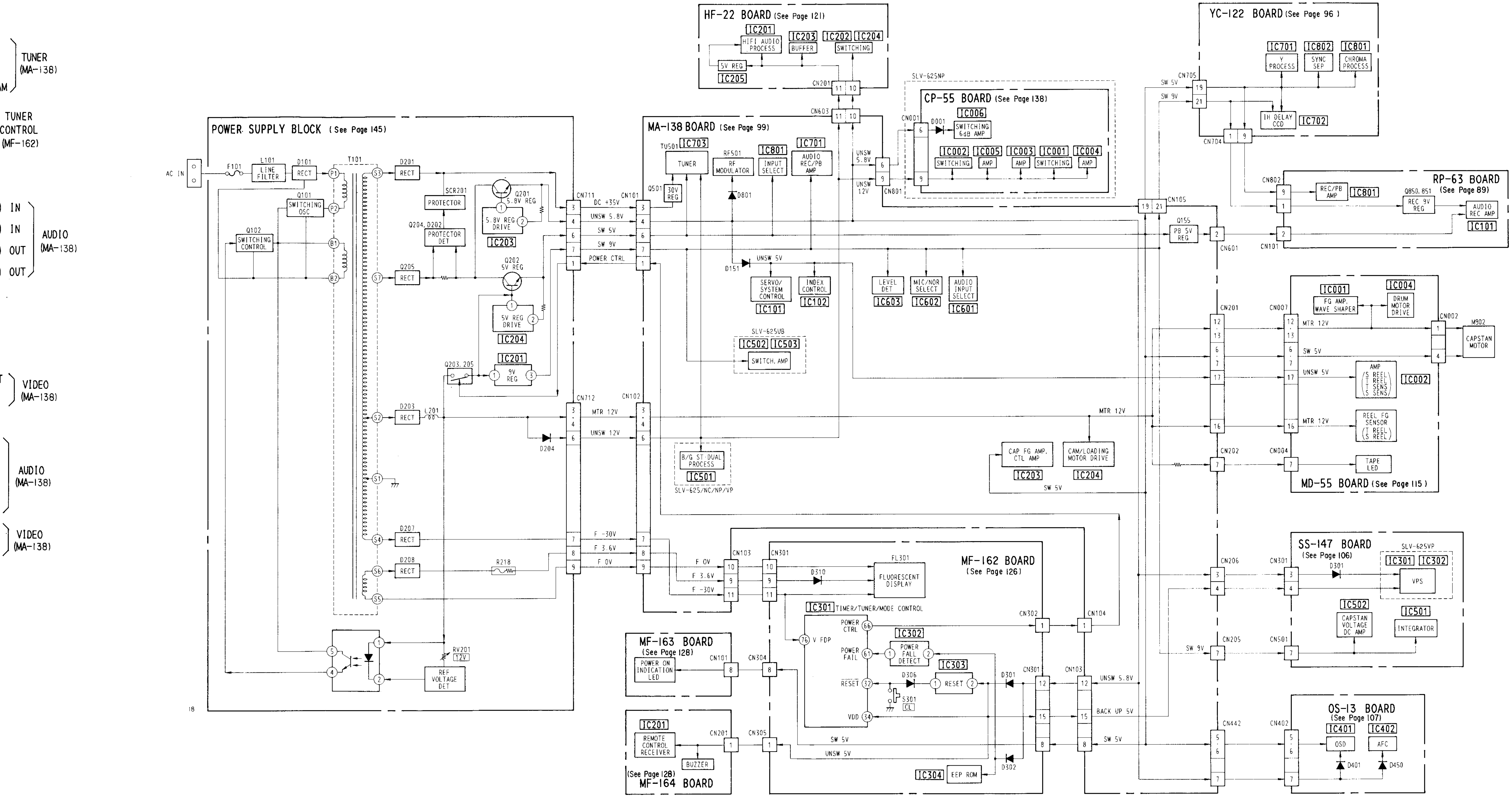
3-16. CANAL PLUS BLOCK DIAGRAM (SLV-625NP ONLY)


CP-55 BOARD
(See Page 138)
CP-54 BOARD
(See Page 140)
CNJ104
CANAL PLUS
CNJ103
EURO AV
CN101
CN003
CN001
CN002
Q101
C+ AV CONT
A.OUT (R)
A.OUT (L)
A.IN (R)
A.IN (L)
V.OUT
V.IN
I SIG
R
G
B
TV V.IN
TV V.OUT
TV A.IN (L)
TV A.IN (R)
TV A.OUT (L)
TV A.OUT (R)
AV AV CONT
CNL A.IN (L)
CNL A.IN (R)
CNL A.OUT (L)
CNL A.OUT (R)
I CONT
CNL V.IN
CNL V.OUT
IC001 (1/2)
IC002 (1/2)
IC003
IC004
IC005
IC006 (1/2)
SW 7
SW 8
CLK
DATA
SW 9
SW 2
SW 3
SW 4
SW 5
SW 6
SWITCHING
Q001
Q004
BUFFER
Q002, 003
D002
BG/I-L
BAND L
PAL/SECAM
TUNER
(MA-138)
DET
TUNER CONTROL
(MF-162)
C+ TU (L) IN
C+ TU (R) IN
C+ TU (L) OUT
C+ TU (R) OUT
AUDIO
(MA-138)
TU V OUT
TU V IN
VIDEO
(MA-138)
A.IN (L)
A.IN (R)
A.OUT (R)
A.OUT (L)
V.OUT
V.IN
18

3-17. POWER


POWER
AC IN
F101
18

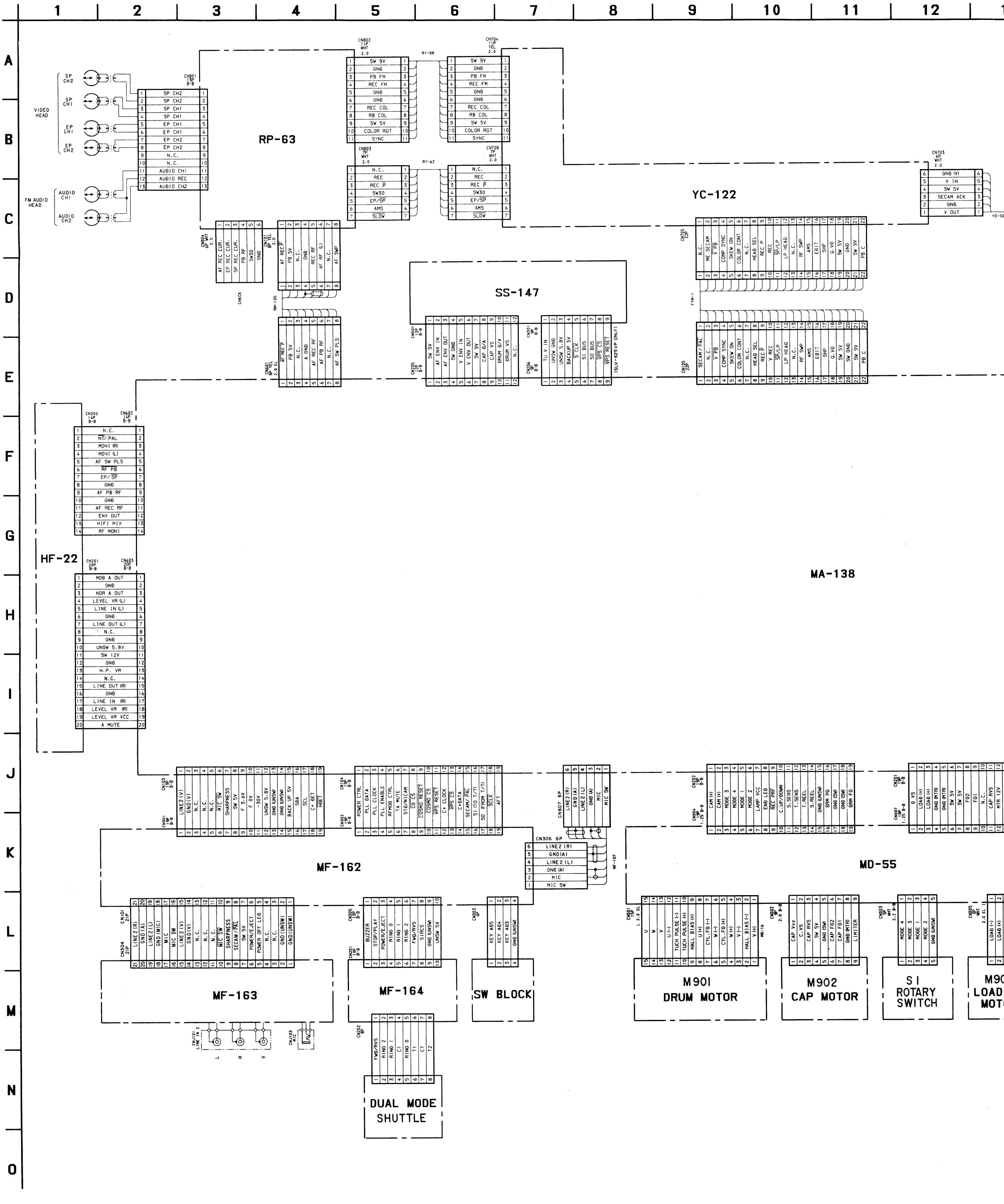
3-17. POWER BLOCK DIAGRAM



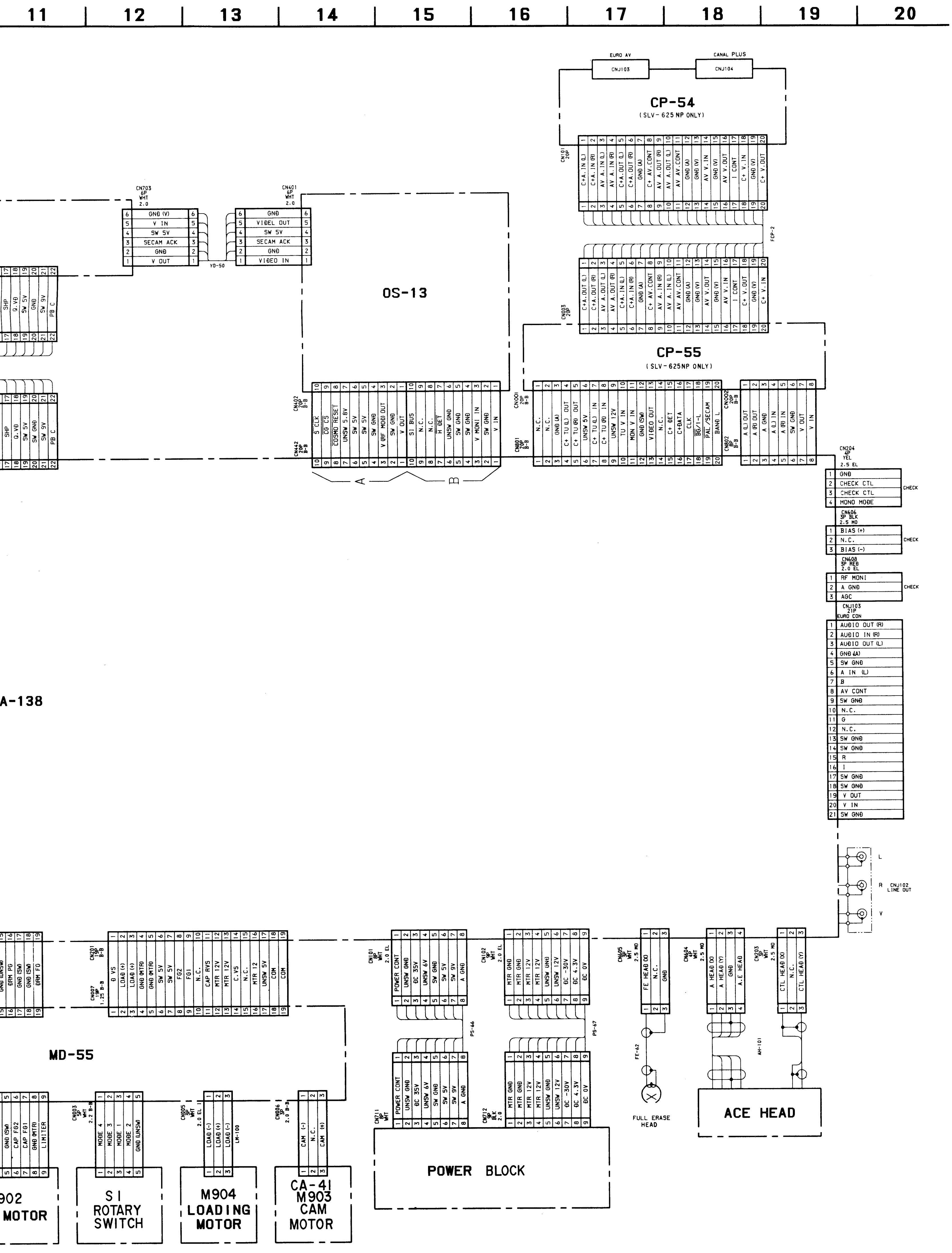
TUNER (MA-138)
TUNER CONTROL (MF-162)
IN
IN
OUT
OUT
AUDIO (MA-138)
VIDEO (MA-138)
AUDIO (MA-138)
VIDEO (MA-138)
POWER SUPPLY BLOCK (See Page 145)
AC IN
F101
L101 LINE FILTER
D101 RECT
T101
Q101 SWITCHING OSC
Q102 SWITCHING CONTROL
D201 RECT
SCR201 PROTECTOR
Q204, D202 PROTECTOR DET
Q201 5.8V REG
5.8V REG DRIVE
IC203
Q205 RECT
Q202 5V REG
5V REG DRIVE
IC204
IC201 9V REG
Q203, 205
D203 RECT
L201
D204
D207 RECT
D208 RECT
R218
RV201 12V
REF VOLTAGE DET
CN711
CN712
DC +35V
UNSW 5.8V
SW 5V
SW 9V
POWER CTRL
MTR 12V
UNSW 12V
F -30V
F 3.6V
F 0V
HF-22 BOARD (See Page 121)
IC201 HIFI AUDIO PROCESS
IC203 BUFFER
IC202
IC204 SWITCHING
5V REG
IC205
CN201
CN603
MA-138 BOARD (See Page 99)
CN101
CN102
TU501 IC703 TUNER
Q501 30V REG
RF501 RF MODULATOR
IC801 INPUT SELECT
IC701 AUDIO REC/PB AMP
D801
D151
UNSW 5V
SERVO/ SYSTEM CONTROL IC101
INDEX CONTROL IC102
SLV-625UB
IC502 IC503 SWITCH. AMP
B/G ST-DUAL PROCESS IC501
SLV-625/NC/NP/VP
LEVEL DET IC603
MIC/NOR SELECT IC602
AUDIO INPUT SELECT IC601
UNSW 5.8V
UNSW 12V
CN801
SLV-625NP
CP-55 BOARD (See Page 138)
CN001
D001
IC006 SWITCHING 6dB AMP
IC002 SWITCHING
IC005 AMP
IC003 AMP
IC001 SWITCHING
IC004 AMP
CAP FG AMP, CTL AMP IC203
CAM/LOADING MOTOR DRIVE IC204
SW 5V
YC-122 BOARD (See Page 96)
CN705
CN704
IC701 Y PROCESS
IC802 SYNC SEP
IC801 CHROMA PROCESS
1H DELAY CCD IC702
RP-63 BOARD (See Page 89)
CN802
REC/PB AMP IC801
Q850, 851 REC 9V REG
AUDIO REC AMP IC101
CN105
Q155 PB 5V REG
CN601
CN101
MD-55 BOARD (See Page 115)
CN201
CN007
IC001 FG AMP, WAVE SHAPER
IC004 DRUM MOTOR DRIVE
CN002
M902 CAPSTAN MOTOR
MTR 12V
SW 5V
UNSW 5V
AMP (S REEL) (T REEL) (T SENS) (S SENS) IC002
REEL FG SENSOR (T REEL) (S REEL)
CN202
CN004
TAPE LED
SS-147 BOARD (See Page 106)
CN206
CN301
D301
SLV-625VP
IC301 IC302 VPS
IC502 CAPSTAN VOLTAGE DC AMP
IC501 INTEGRATOR
CN205
CN501
SW 9V
OS-13 BOARD (See Page 107)
CN442
CN402
IC401 OSD
IC402 AFC
D401
D450
MF-162 BOARD (See Page 126)
CN103
CN301
FL301 FLUORESCENT DISPLAY
D310
IC301 TIMER/TUNER/MODE CONTROL
V FDP
POWER CTRL
POWER FAIL
RESET
VDD
IC302 POWER FALL DETECT
IC303 RESET
D306
S301 CL
D301
D302
IC304 EEP ROM
CN302
CN104
CN301
CN103
UNSW 5.8V
BACK UP 5V
SW 5V
UNSW 5V
MF-163 BOARD (See Page 128)
POWER ON INDICATION LED
CN101
CN304
IC201 REMOTE CONTROL RECEIVER
BUZZER
CN201
CN305
(See Page 128) MF-164 BOARD

SECTION 4
PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-1. FRAME SCHEMATIC DIAGRAM



1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
VIDEO HEAD
SP CH2
SP CH1
EP CH1
EP CH2
FM AUDIO HEAD
AUDIO CH1
AUDIO CH2
RP-63
RY-59
RY-62
YC-122
SS-147
HF-22
MA-138
MF-162
MD-55
MF-163
MF-164
SW BLOCK
M901 DRUM MOTOR
M902 CAP MOTOR
S1 ROTARY SWITCH
DUAL MODE SHUTTLE


11
12
13
14
15
16
17
18
19
20
EURO AV
CNJ103
CANAL PLUS
CNJ104
CP-54
(SLV-625NP ONLY)
CN101 20P
C+A.IN (L)
C+A.IN (R)
AV A.IN (L)
AV A.IN (R)
C+A.OUT (L)
C+A.OUT (R)
GND (A)
C+ AV.CONT
AV A.OUT (R)
AV A.OUT (L)
AV AV.CONT
GND (A)
GND (V)
AV V.IN
GND (V)
AV V.OUT
I.CONT
C+ V.IN
GND (V)
C+ V.OUT
FCP-2
CN003 20P
CP-55
(SLV-625NP ONLY)
CN703 6P WHT 2.0
GND (V)
V IN
SW 5V
SECAM ACK
GND
V OUT
YD-50
CN401 6P WHT 2.0
GND
VIDEL OUT
SW 5V
SECAM ACK
GND
VIDEO IN
OS-13
CN402 20P B-B
CN442 20P B-B
S CLK
CG CS
COSMO RESET
UNSW 5.8V
SW 5V
SW 5V
SW GND
V (RF MOD) OUT
GND
V OUT
S1 BUS
N.C.
H DET
UNSW GND
SW GND
V MONI IN
SW GND
V IN
A
B
CN001 20P B-B
CN801 20P B-B
N.C.
N.C.
GND (A)
C+ TU (L) OUT
C+ TU (R) OUT
UNSW 5V
C+ TU (L) IN
C+ TU (R) IN
UNSW 12V
TU V IN
MON V IN
GND (SW)
VIDEO OUT
N.C.
C+ DET
C+DATA
CLK
BG/I-L
PAL/SECAM
BAND L
CN002 8P B-B
CN802 8P B-B
A (L) OUT
A (R) OUT
A GND
A (L) IN
A (R) IN
SW GND
V OUT
V IN
SHP
Q.VD
SW 5V
GND
SW 9V
PB C
CN204 4P YEL 2.5 EL
GND
CHECK CTL
CHECK CTL
MONO MODE
CHECK
CN606 3P BLK 2.5 MD
BIAS (+)
N.C.
BIAS (-)
CHECK
CN608 3P RED 2.0 EL
RF MONI
A GND
AGC
CHECK
CNJ103 21P EURO CON
AUDIO OUT (R)
AUDIO IN (R)
AUDIO OUT (L)
GND (A)
SW GND
A IN (L)
B
AV CONT
SW GND
N.C.
G
N.C.
SW GND
SW GND
R
I
SW GND
SW GND
V OUT
V IN
SW GND
L
R
V
CNJ102 LINE OUT
A-138
CN201 18P B-B
CN907 18P 1.25 B-B
D VS
LOAD (+)
LOAD (+)
GND (MTR)
GND (MTR)
SW 5V
SW 5V
FG2
FG1
N.C.
CAP RVS
MTR 12V
MTR 12V
C.VS
N.C.
MTR 12
UNSW 5V
COM
GND (UNSW)
BRM FG
GND (SW)
BRM FG
MD-55
CN101 8P WHT 2.0 EL
POWER CONT
UNSW GND
DC 35V
UNSW 6V
UNSW 6V
SW 5V
SW 9V
A GND
PS-66
CN711 8P WHT
CN102 9P WHT 2.0 EL
MTR GND
MTR GND
MTR 12V
MTR 12V
UNSW GND
UNSW 12V
DC -30V
DC 4.3V
DC 0V
PS-67
CN712 9P BLK
POWER BLOCK
CN605 3P WHT 2.5 MD
FE HEAD (X)
N.C.
GND
FE-42
FULL ERASE HEAD
CN604 4P WHT 2.5 MD
A HEAD (X)
A HEAD (Y)
GND
A.E HEAD
AH-101
CN303 3P WHT 2.5 MD
CTL HEAD (X)
N.C.
CTL HEAD (Y)
ACE HEAD
GND (SW)
CAP FG2
CAP FG1
GND (MTR)
LIMITER
902
MOTOR
CN903 5P 2.2 B-B
MODE 4
MODE 3
MODE 1
MODE 2
GND (UNSW)
S1
ROTARY SWITCH
CN905 3P 2.0 EL
LOAD (+)
LOAD (+)
LOAD (-)
LM-100
M904
LOADING
MOTOR
CN906 3P 2.0 B-B
CAM (-)
N.C.
CAM (+)
CA-41
M903
CAM
MOTOR

4-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this , the necessary note is printed in each block.)

- **For printed wiring boards.**
- ○— : indicated a lead wire mounted on the component side.
- —— : indicated a lead wire mounted on the conductor side.
- ● : Through hole.
- ■ : Parts mounted on the conductor side.
- ▨ : Pattern from the side which enables seeing.
- ▨ : Pattern of the rear side.
- Circled numbers refer to waveforms.

Caution:

Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component side)	Parts on the parts face side seen from the parts face are indicated.

- **For schematic diagrams.**
- Caution when replacing chip parts.
  New parts must be attached after removal of chip.
  Be careful not to heat the minuts side of tantalum capacitor, because it is damaged by the heat.
- All resistors are in ohms, 1/4W unless otherwise noted.
  Chip resistor are 1/10W unless otherwise noted.
  kΩ : 1000Ω , MΩ : 1000kΩ .
- All capacitors are in μF unless otherwise noted. pF: μμF.
  50V or less are not indicated except for electrolytics and tantalums.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ▭ : nonflammable resistor.
- ▭ : fusible resistor.
- ▭ : panel designation.
- △ : internal component.
- ▭ : adjustment for repeair.
- —— : B+ Line.
- - - - : B– Line.
- ⇨ : IN/OUT direction of (+, –) B LINE.
- Circled numbers refer to waveforms.
- Voltages are dc between ground and measurement points.
- Readings are taken with a color-bar signal input.
- Readings are taken with a digital multimeter (DC10MΩ).
- Voltages are taken with a VOM (Input impedance 10MΩ).
- Voltage variations may be noted due to normal production tolerances.

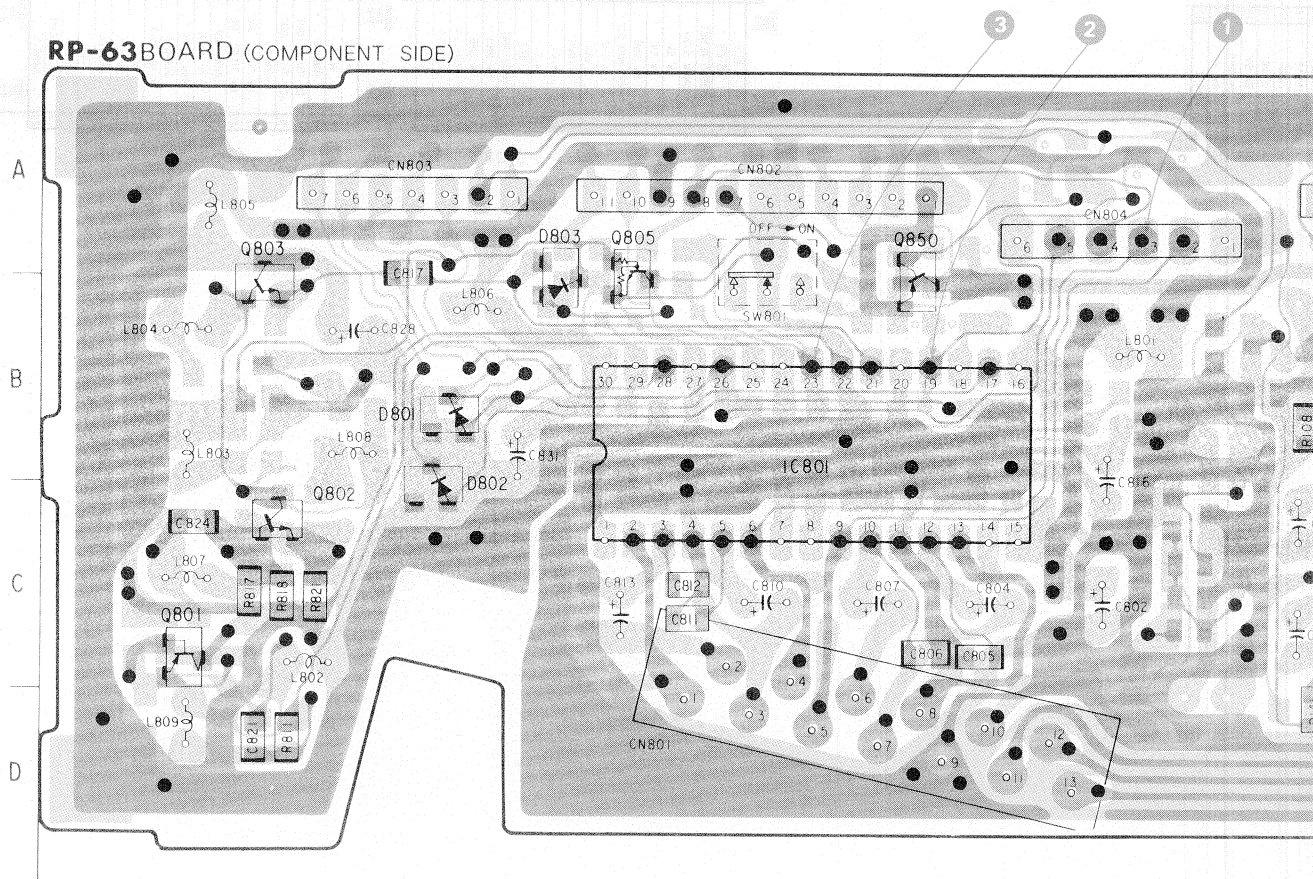
Note: The components identi- fied by mark ⚠ or dotted line with mark ⚠ are critical for safty.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

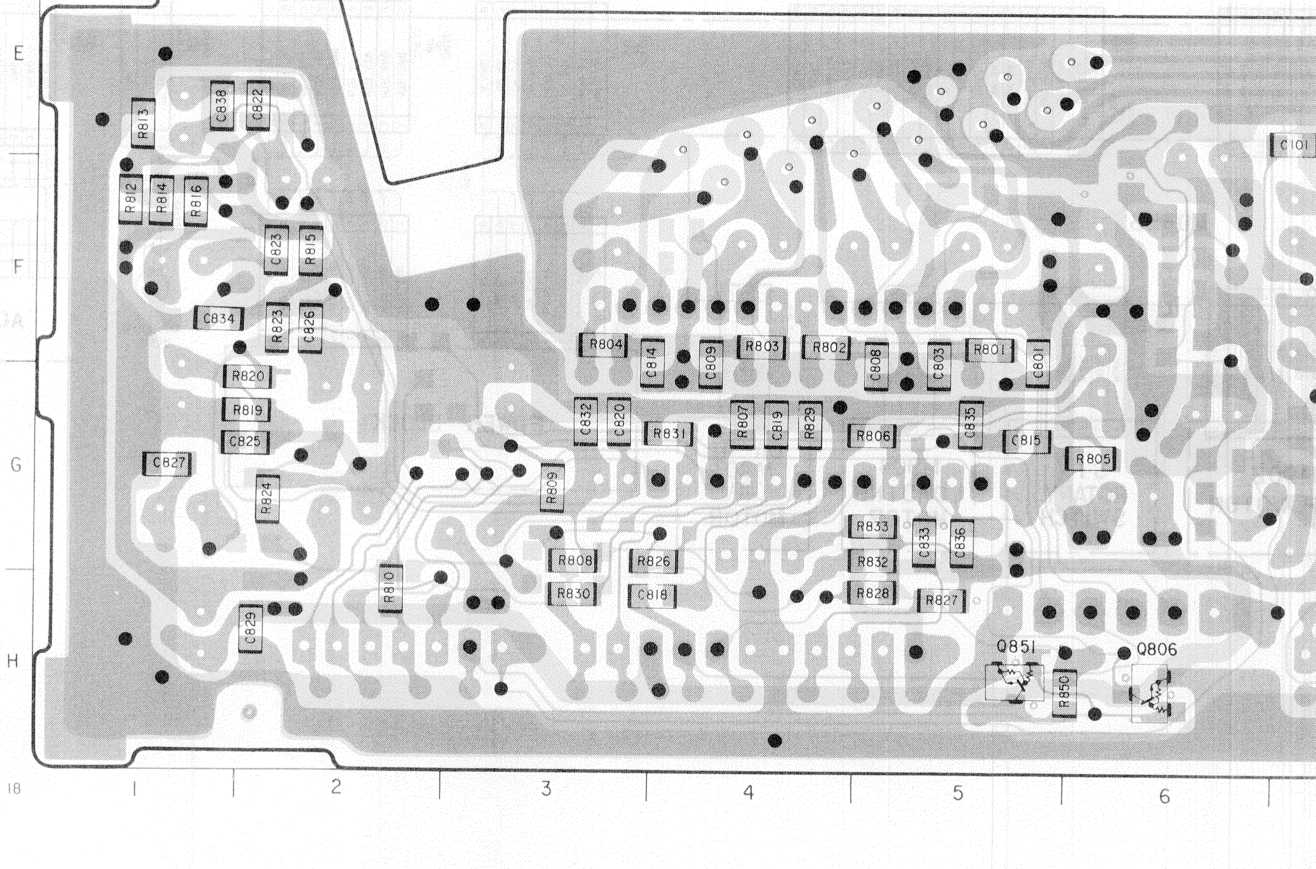
RP-63(HEAD AMP) PRINTED WIRING BOARD

–Ref.No. RP-63 BOARD: 1,000 series–

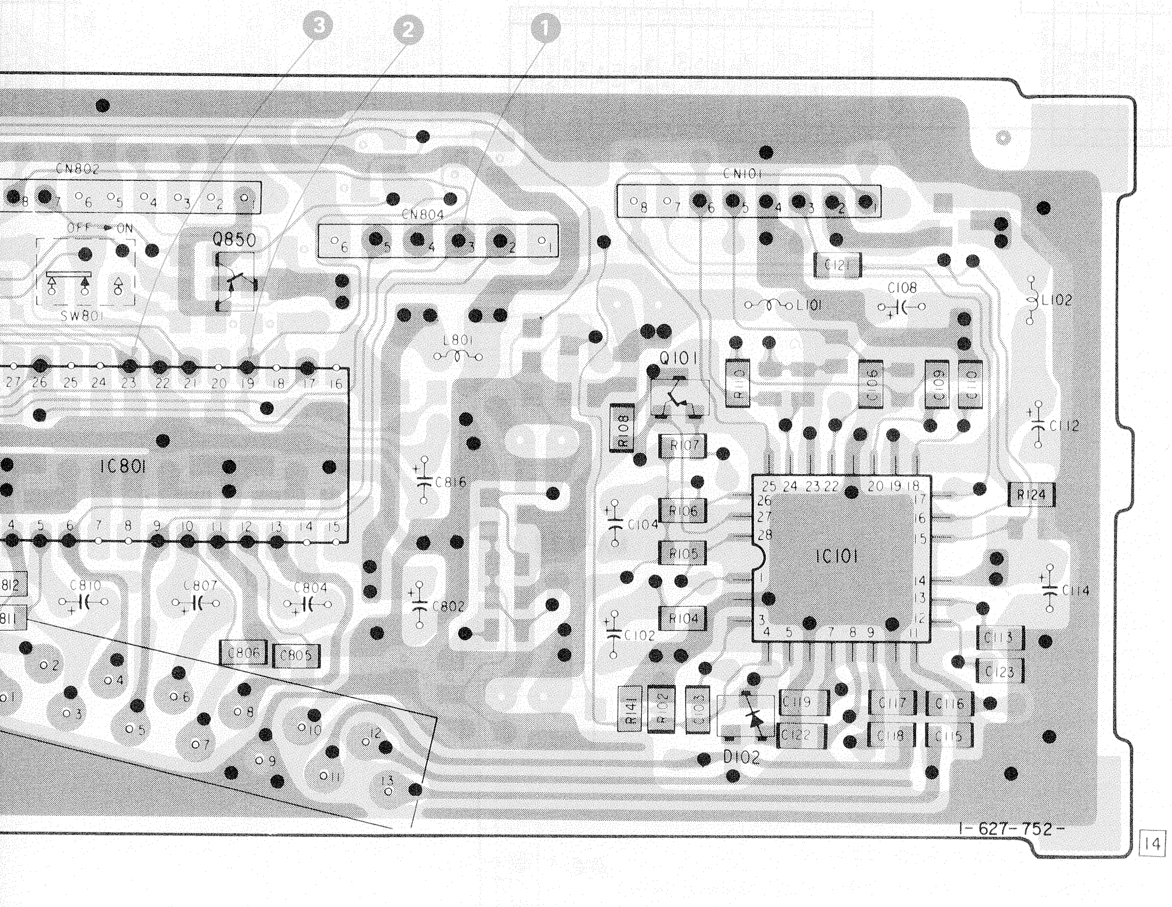
RP-63BOARD (COMPONENT SIDE)

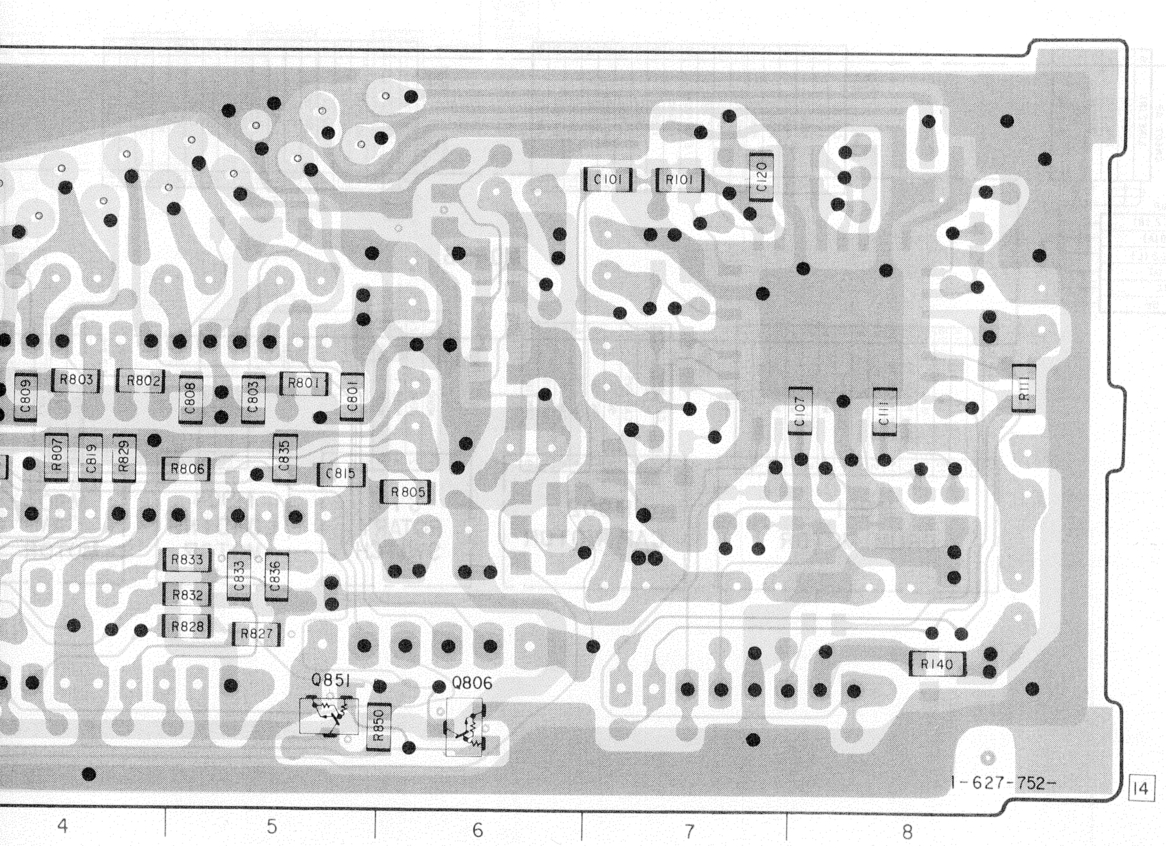

③
②
①
A
B
C
D
CN803
CN802
CN804
L805
Q803
D803
Q805
OFF ON
Q850
C817
L806
SW801
L804
C828
L801
D801
L808
C831
L803
D802
IC801
C816
Q802
C824
L807
R817
R818
R821
C813
C812
C810
C807
C804
C802
C811
Q801
C806
C805
L802
L809
C821
R811
CN801

RP-63 BOARD (CONDUCTOR SIDE)


E
F
G
H
R813
C838
C822
C101
R812
R814
R816
C823
R815
C834
R823
C826
R804
C814
C809
R803
R802
C808
C803
R801
C801
R820
R819
C832
C820
R831
R807
C819
R829
R806
C835
C815
R805
C825
C827
R824
R809
R833
C833
C836
R808
R826
R832
R810
R830
C818
R828
R827
C829
Q851
Q806
R850
18
1
2
3
4
5
6

RD


③
②
①
CN802
CN804
CN101
OFF ON
SW801
Q850
L801
L101
C108
L102
Q101
IC801
IC101
C121
C106
C109
C110
C112
C124
C114
C113
C123
C116
C115
C117
C118
C119
C122
C103
C102
C104
R101
R102
R104
R105
R106
R107
R108
R110
R141
C816
C802
C810
C807
C804
R812
R811
C806
C805
D102
1-627-752-
14


C101
R101
C120
R803
R802
R801
C809
C808
C803
C801
R807
C819
R829
R806
C835
C815
R805
R833
R832
R828
R827
C833
C836
C107
C111
R111
R140
Q851
Q806
R850
1-627-752-
14
4
5
6
7
8

RP-63 BOARD

CN101	A-7
CN801	D-4
CN802	A-4
CN803	A-2
CN804	B-6
D102	D-7
D801	B-2
D802	B-2
D803	A-3
IC101	C-8
IC801	B-4
Q101	B-7
Q801	C-1
Q802	C-2
Q803	B-2
Q805	A-3
Q806	H-6
Q850	A-5
Q851	H-5

< DIODE >

D102	8-719-400-18	DIODE	MA152WK
D801	8-719-400-18	DIODE	MA152WK
D802	8-719-400-18	DIODE	MA152WK
D803	8-719-400-18	DIODE	MA152WK

< IC >

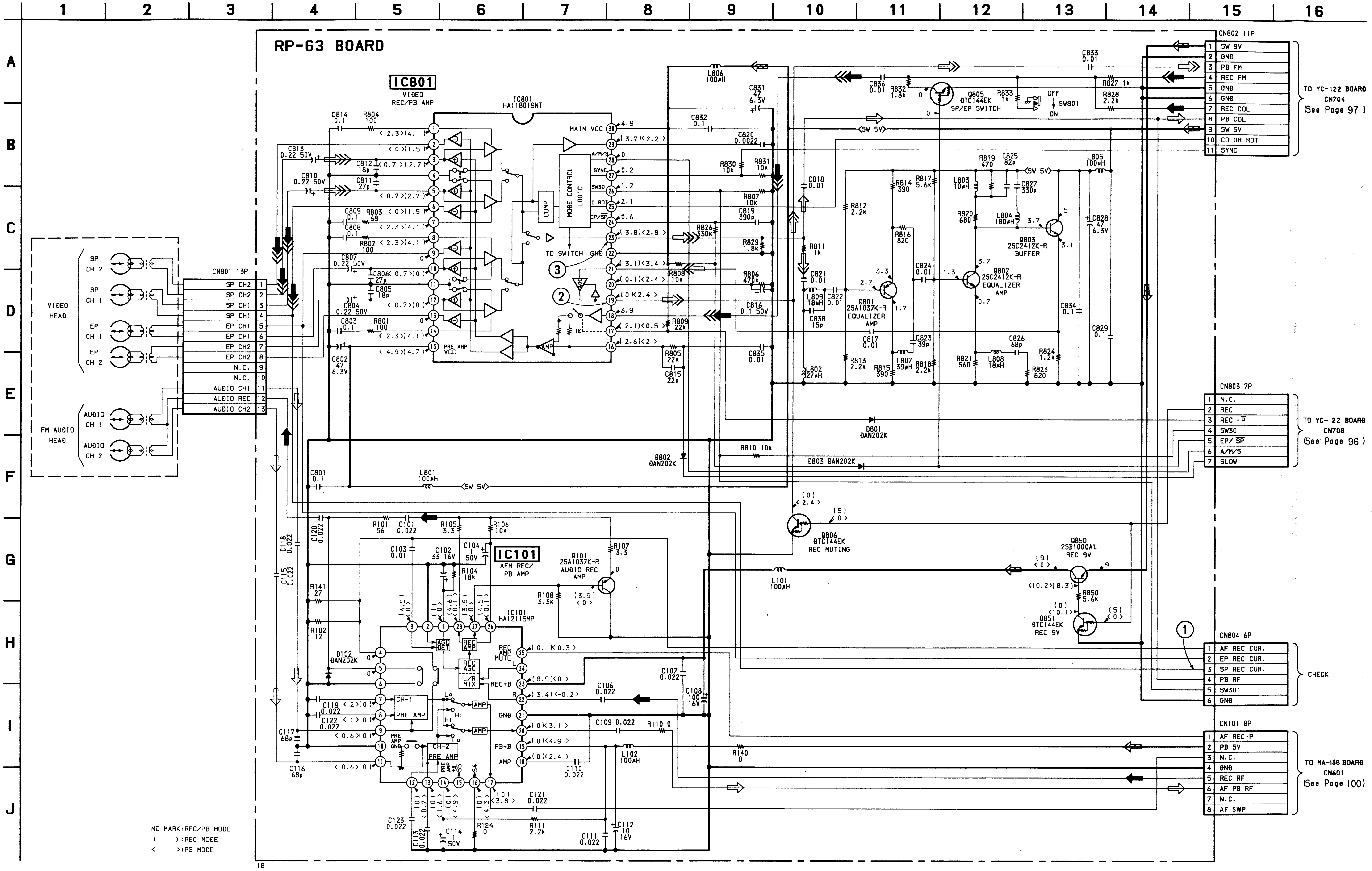
IC101	8-759-320-55	IC	HA12115MP
IC801	8-759-320-52	IC	HA118019NT

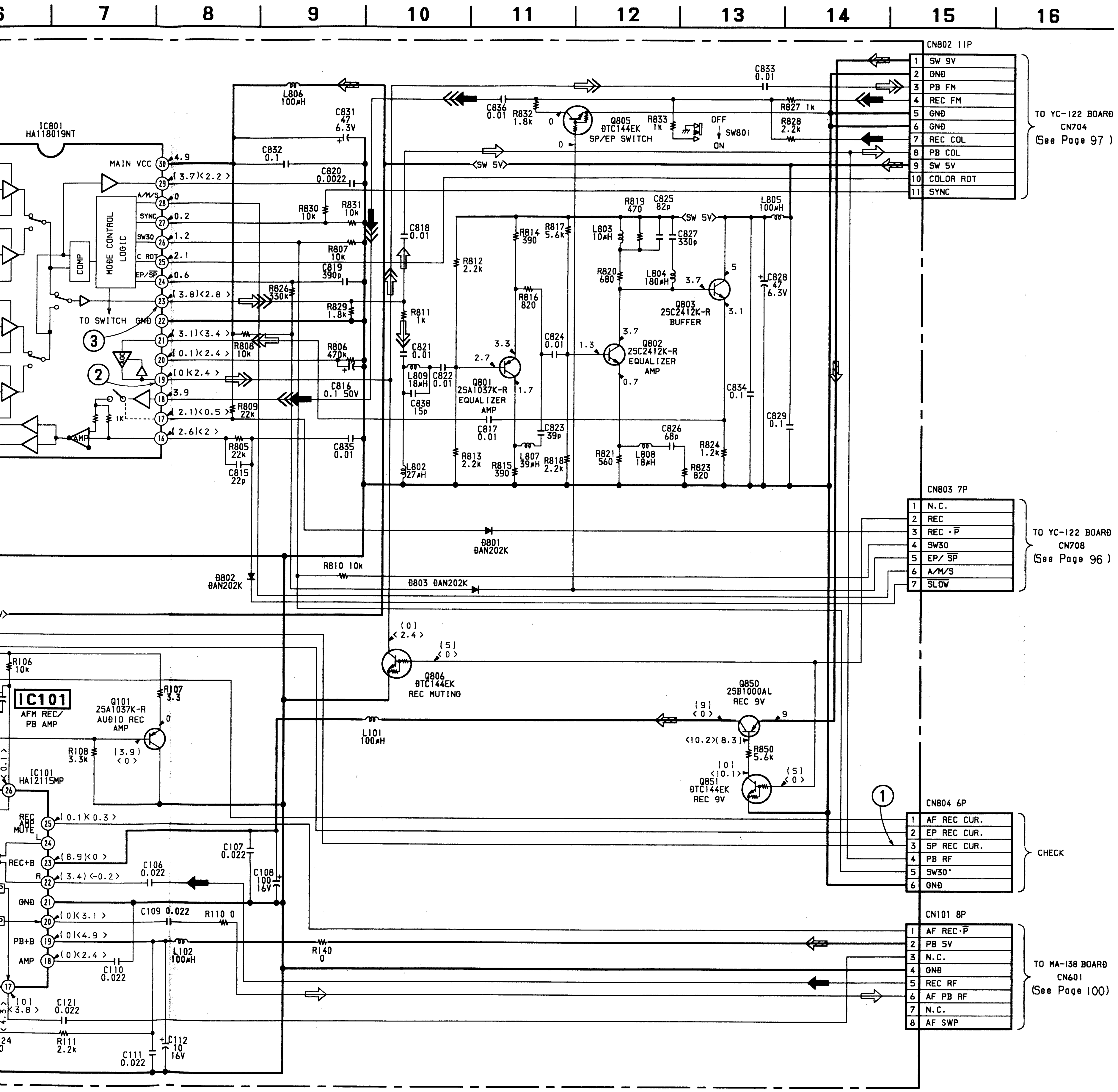
< TRANSISTOR >

Q101	8-729-216-22	TRANSISTOR	2SA1162-G
Q801	8-729-216-22	TRANSISTOR	2SA1162-G
Q802	8-729-120-28	TRANSISTOR	2SC1623-L5L6
Q803	8-729-120-28	TRANSISTOR	2SC1623-L5L6
Q805	8-729-901-01	TRANSISTOR	DTC144EK
Q806	8-729-901-01	TRANSISTOR	DTC144EK
Q850	8-729-301-98	TRANSISTOR	2SB1000A-L
Q851	8-729-901-01	TRANSISTOR	DTC144EK

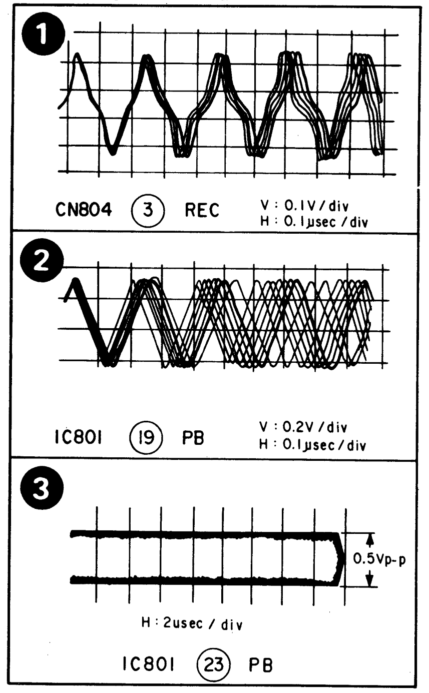
RP-63(HEAD AMP) SCHEMATIC DIAGRAM

—Ref.No. RP-63 BOARD: 1,000 series—


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
A
B
C
D
E
F
G
H
I
J
RP-63 BOARD
IC801
VIDEO REC/PB AMP
IC801 HA118019NT
MAIN VCC
MODE CONTROL LOGIC
COMP
TO SWITCH
GND
PRE AMP VCC
A/M/S
SYNC
SW30
C ROT
EP/SP
VIDEO HEAD
SP CH 2
SP CH 1
EP CH 1
EP CH 2
FM AUDIO HEAD
AUDIO CH 1
AUDIO CH 2
CN801 13P
SP CH2
SP CH2
SP CH1
SP CH1
EP CH1
EP CH1
EP CH2
EP CH2
N.C.
N.C.
AUDIO CH1
AUDIO REC
AUDIO CH2
CN802 11P
SW 9V
GND
PB FM
REC FM
GND
GND
REC COL
PB COL
SW 5V
COLOR ROT
SYNC
TO YC-122 BOARD CN704 (See Page 97)
Q805 DTC144EK SP/EP SWITCH
SW801
OFF
ON
Q801 2SA1037K-R EQUALIZER AMP
Q802 2SC2412K-R EQUALIZER AMP
Q803 2SC2412K-R BUFFER
CN803 7P
N.C.
REC
REC · P
SW30
EP/SP
A/M/S
SLOW
TO YC-122 BOARD CN708 (See Page 96)
D801 DAN202K
D802 DAN202K
D803 DAN202K
L801 100μH
SW 5V
Q806 DTC144EK REC MUTING
Q850 2SB1000AL REC 9V
Q851 DTC144EK REC 9V
L101 100μH
IC101
AFM REC/PB AMP
IC101 HA12115MP
Q101 2SA1037K-R AUDIO REC AMP
D102 DAN202K
AGC DET
REC AMP
REC AGC
L/R MIX
REC MUTE
REC+B
GND
PB+B
AMP
CH-1 PRE AMP
CH-2 PRE AMP
CN804 6P
AF REC CUR.
EP REC CUR.
SP REC CUR.
PB RF
SW30'
GND
CHECK
CN101 8P
AF REC·P
PB 5V
N.C.
GND
REC RF
AF PB RF
N.C.
AF SWP
TO MA-138 BOARD CN601 (See Page 100)
①
②
③
NO MARK:REC/PB MODE
( ):REC MODE
< >:PB MODE
18


7
8
9
10
11
12
13
14
15
16
CN802 11P
1 SW 9V
2 GND
3 PB FM
4 REC FM
5 GND
6 GND
7 REC COL
8 PB COL
9 SW 5V
10 COLOR ROT
11 SYNC
TO YC-122 BOARD CN704 (See Page 97)
IC801 HA118019NT
MAIN VCC
MODE CONTROL LOGIC
COMP
TO SWITCH
GND
Q805 DTC144EK SP/EP SWITCH
SW801 OFF ON
Q801 2SA1037K-R EQUALIZER AMP
Q802 2SC2412K-R EQUALIZER AMP
Q803 2SC2412K-R BUFFER
CN803 7P
1 N.C.
2 REC
3 REC·P
4 SW30
5 EP/SP
6 A/M/S
7 SLOW
TO YC-122 BOARD CN708 (See Page 96)
D801 DAN202K
D802 DAN202K
D803 DAN202K
Q806 DTC144EK REC MUTING
Q850 2SB1000AL REC 9V
Q851 DTC144EK REC 9V
IC101 AFM REC/PB AMP
IC101 HA12115MP
Q101 2SA1037K-R AUDIO REC AMP
CN804 6P
1 AF REC CUR.
2 EP REC CUR.
3 SP REC CUR.
4 PB RF
5 SW30
6 GND
CHECK
CN101 8P
1 AF REC·P
2 PB 5V
3 N.C.
4 GND
5 REC RF
6 AF PB RF
7 N.C.
8 AF SWP
TO MA-138 BOARD CN601 (See Page 100)
①
②
③

RP-63 BOARD



·SIGNAL PATH

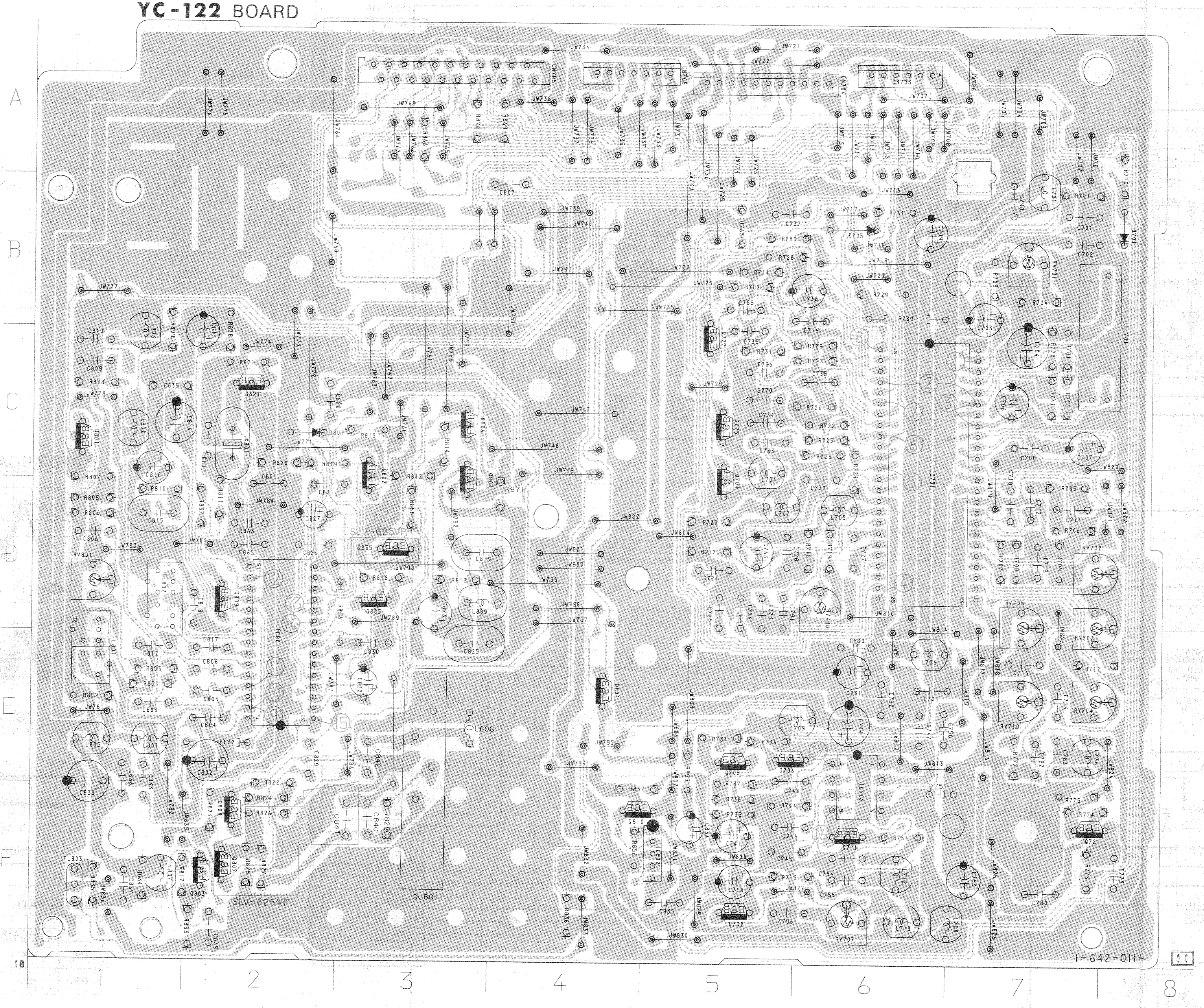
	VIDEO Signal			AUDIO Signal
	CHROMA	Y	Y/CHROMA	
REC	➡	➡➡	➡➡➡	➡
PB	⇨	⇨⇨	⇨⇨⇨	⇨

YC-122(VIDEO PROCESS) PRINTED WIRING BOARD

—Ref. No. YC-122 BOARD: 2,000 series—

YC-122 BOARD

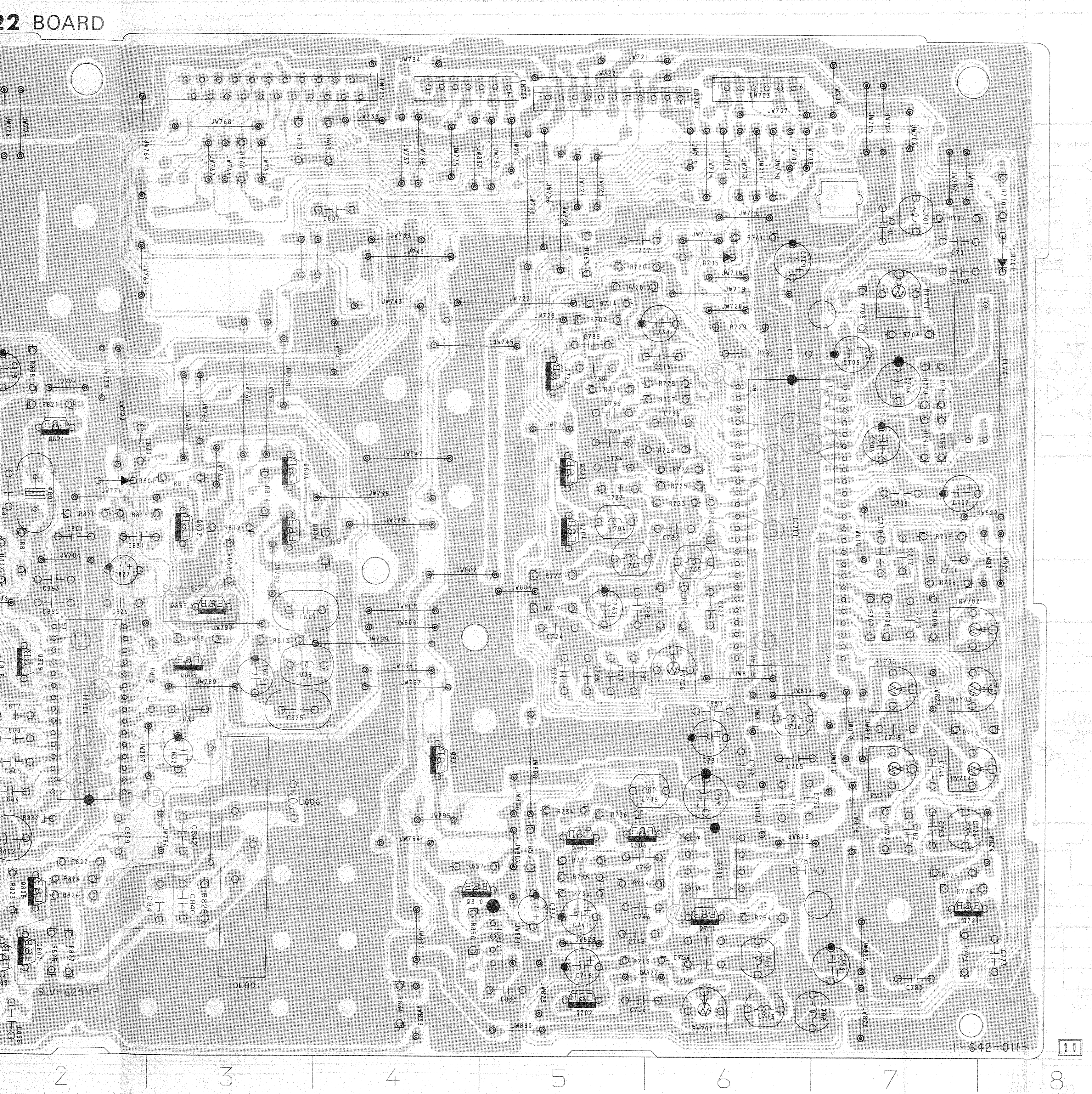
CN703	A-6
CN704	A-5
CN705	A-3
CN708	A-4
D701	B-8
D705	B-6
D801	C-2
IC701	D-6
IC702	F-6
IC801	E-2
IC802	F-5
Q702	F-5
Q704	D-5
Q705	E-5
Q706	E-5
Q711	F-6
Q721	F-7
Q722	C-5
Q723	C-5
Q801	C-1
Q802	D-3
Q803	F-2
Q804	D-3
Q805	D-3
Q806	C-3
Q807	F-2
Q808	F-2
Q809	D-2
Q810	F-5
Q821	C-2
Q855	D-3
Q871	E-4
RV701	B-7
RV702	D-7
RV703	D-7
RV704	E-7
RV705	D-7
RV707	F-6
RV708	D-6
RV710	E-7
RV801	D-1


YC-122 BOARD
A
B
C
D
E
F
1
2
3
4
5
6
7
8
SLV-625VP
DL801
IC801
IC701
IC702
1-642-011-
11

ESS) PRINTED WIRING BOARD

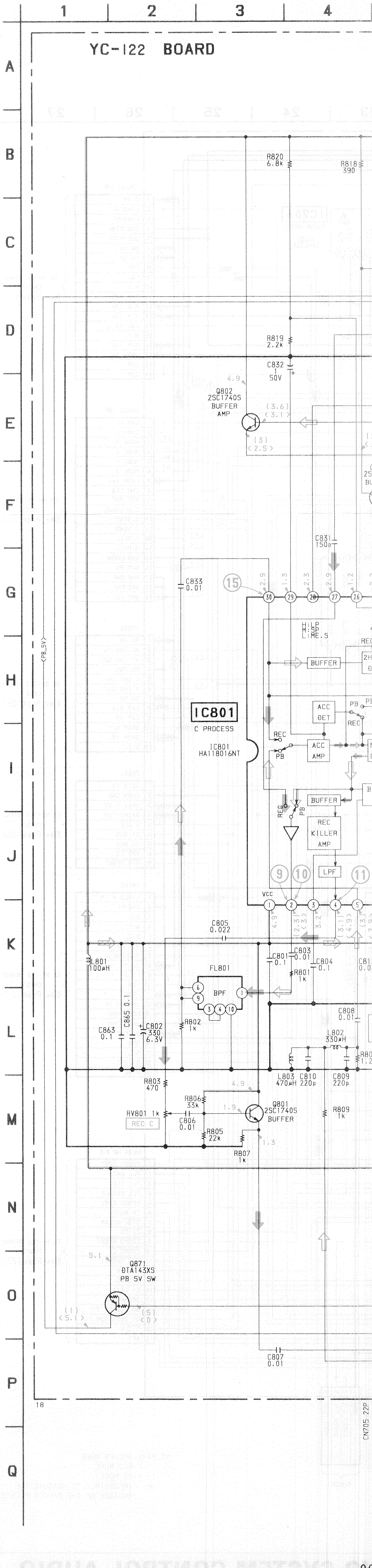
,000 series—

22 BOARD


SLV-625VP
IC701
IC702
IC801
DL801
L806
1-642-011-
11
2
3
4
5
6
7
8

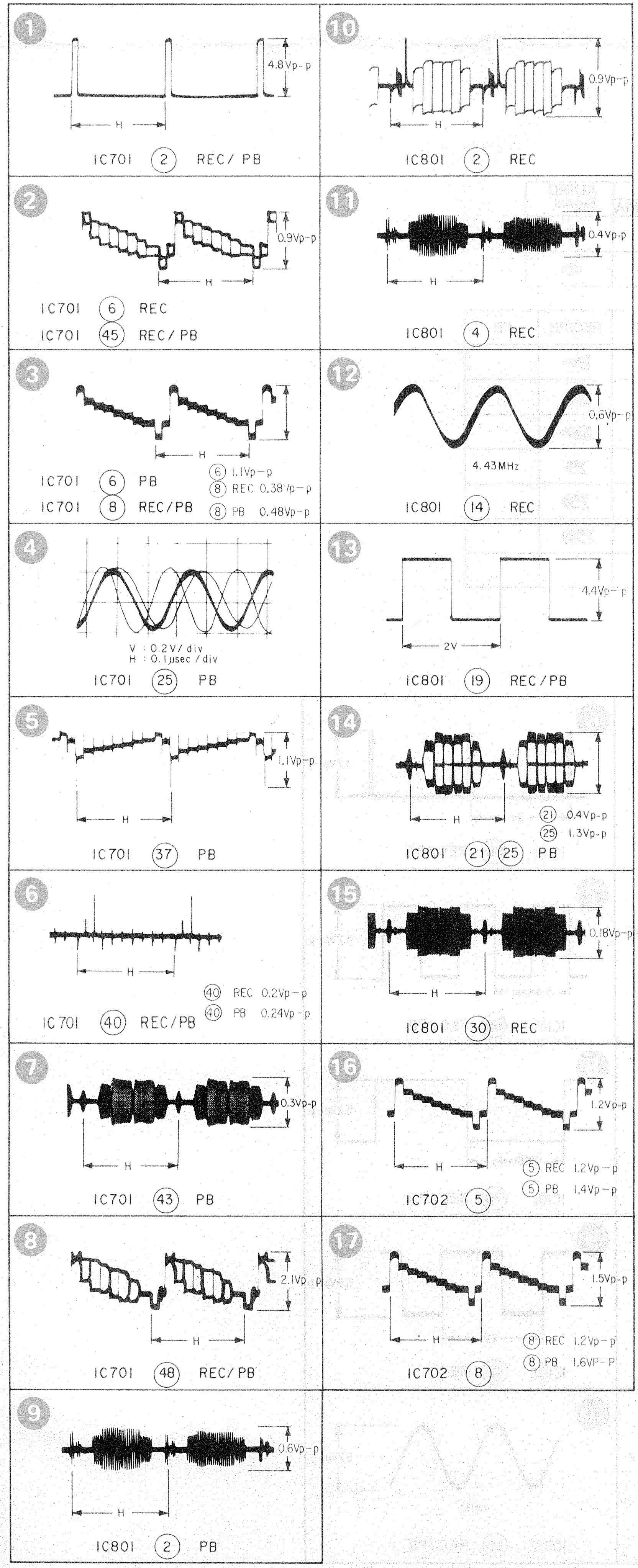
YC122(VIDEO PROCESS) SCHEMATIC DIAGRAM

—Ref. No. YC-122 BOARD: 2,000 series—



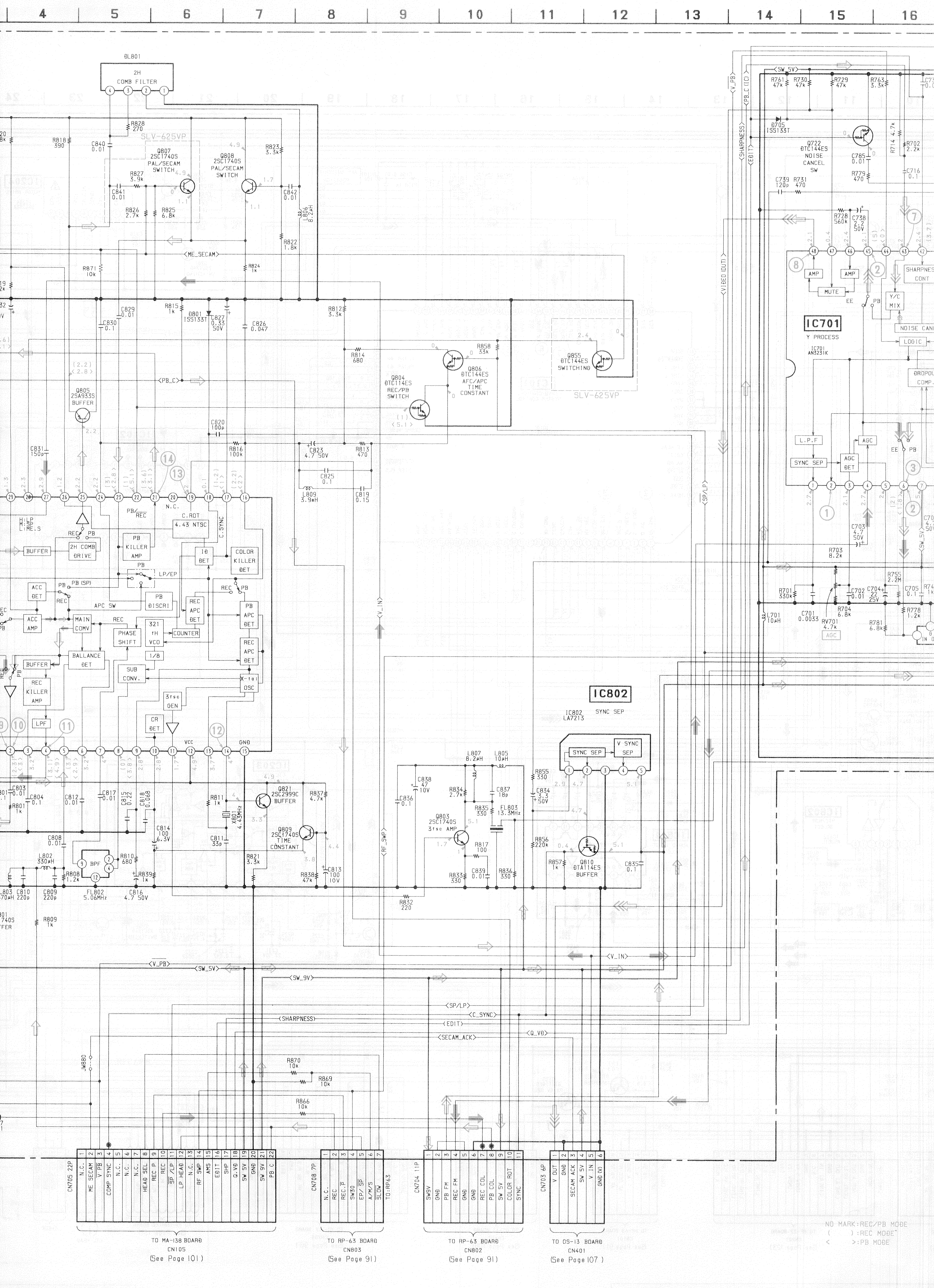
1
2
3
4
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
YC-122 BOARD
R820 6.8k
R818 390
R819 2.2k
C832 1 50V
Q802 2SC1740S BUFFER AMP
C831 150p
C833 0.01
IC801
C PROCESS
IC801 HA118016NT
BUFFER
ACC DET
ACC AMP
REC KILLER AMP
LPF
VCC
C805 0.022
L801 100μH
C801 0.1
C803 0.01
C804 0.1
R801 1k
FL801
BPF
C863 0.1
C865 0.1
C802 330 6.3V
R802 1k
C808 0.01
L802 330μH
L803 470μH
C810 220p
C809 220p
R803 470
R806 33k
RV801 1k
REC C
C806 0.01
Q801 2SC1740S BUFFER
R809 1k
R805 22k
R807 1k
Q871 DTA143XS PB 5V SW
C807 0.01
(PB 5V)
CN705 22P
18

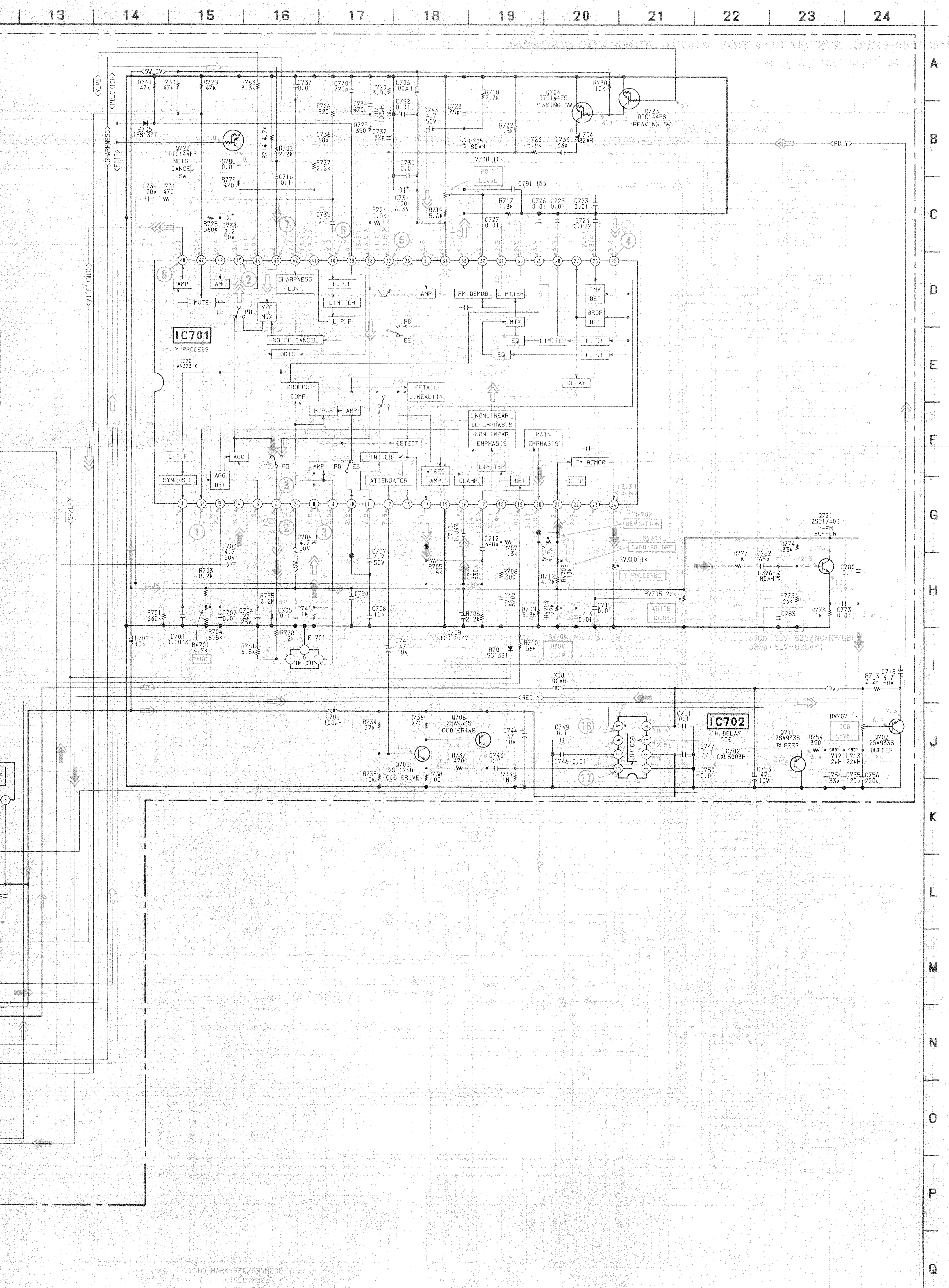
YC-122 BOARD



·SIGNAL PATH

	VIDEO Signal			AUDIO Signal
	CHROMA	Y	Y/CHROMA	
REC	➡	➡	➡	
PB	⇨	⇨	⇨	

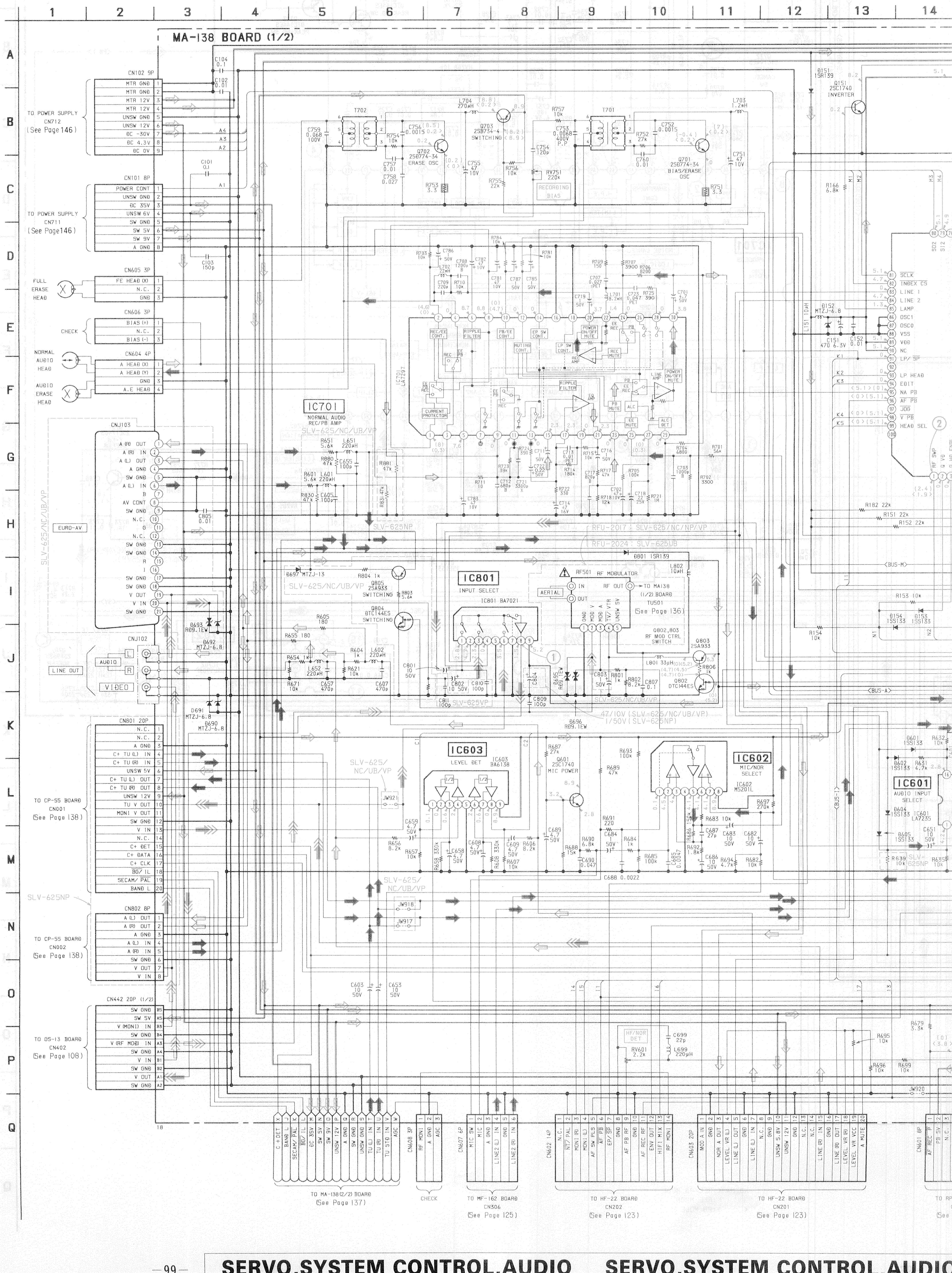

4
5
6
7
8
9
10
11
12
13
14
15
16
DL801
2H
COMB FILTER
R828 270
SLV-625VP
Q807 2SC1740S PAL/SECAM SWITCH
Q808 2SC1740S PAL/SECAM SWITCH
R823 3.3k
R818 390
C840 0.01
R827 3.9k
C841 0.01
R826 2.7k
R825 6.8k
C842 0.01
L806 8.2µH
R822 1.8k
<ME_SECAM>
R871 10k
R824 1k
C829 0.01
C830 0.1
R815 1k
D801 1SS133T
C827 0.33 50V
C826 0.047
R812 3.3k
R814 680
R858 33k
Q804 DTC114ES REC/PB SWITCH
Q806 DTC144ES AFC/APC TIME CONSTANT
Q855 DTC144ES SWITCHING
SLV-625VP
<PB_C>
Q805 2SA933S BUFFER
C820 100p
R816 100k
C823 4.7 50V
R813 470
C825 0.1
L809 3.9mH
C819 0.15
C831 150p
N.C.
C.ROT
4.43 NTSC
C.SYNC
PB/REC
REC PB
2H COMB DRIVE
BUFFER
PB KILLER AMP
ID DET
COLOR KILLER DET
LP/EP
PB (SP)
ACC DET
ACC AMP
APC SW
PB DISCRI
REC APC DET
PB APC DET
MAIN CONV
PHASE SHIFT
321 fH VCO
COUNTER
BALLANCE DET
1/8
REC APC DET
SUB CONV.
X-tal OSC
BUFFER
REC KILLER AMP
LPF
3fsc GEN
CR DET
VCC
GND
C803 0.01
C804 0.1
R801 1k
C812 0.01
C817 0.01
C815 0.22
C818 0.068
R811 1k
X801 4.43MHz
Q821 2SC2999C BUFFER
R837 4.7k
C814 100 6.3V
C811 33p
Q809 2SC1740S TIME CONSTANT
C808 0.01
L802 330µH
BPF
R810 680
R808 1.2k
R839 1k
R821 3.3k
R838 47k
C813 100 10V
C809 220p
C810 220p
FL802 5.06MHz
C816 4.7 50V
R809 1k
<V_IN>
<RF_SWP>
IC802
IC802 LA7213
SYNC SEP
V SYNC SEP
L807 8.2µH
L805 10µH
R855 330
C838 47 10V
C836 0.1
R834 2.7k
C837 18p
C834 3.3 50V
R835 330
FL803 13.3MHz
Q803 2SC1740S 3fsc AMP
R817 100
R856 220k
Q810 DTA114ES BUFFER
R857 1k
C835 0.1
C839 0.01
R833 330
R836 330
R832 220
<V_IN>
<V_PB>
<SW_5V>
<SW_9V>
<SP/LP>
<C_SYNC>
<EDIT>
<SHARPNESS>
<SECAM_ACK>
<Q_VD>
JW880
R870 10k
R869 10k
R866 10k
<SP/LP>
<VIDEO (OUT)>
<V_PB>
<PB_C (C)>
<SHARPNESS>
<EDIT>
<SW_5V>
R761 47k
R730 47k
R729 47k
R763 3.3k
D705 1SS133T
Q722 DTC144ES NOISE CANCEL SW
R714 4.7k
R702 2.2k
C785 0.01
C716 0.1
R779 470
C739 120p
R731 470
R728 560k
C738 2.2 50V
AMP
AMP
MUTE
EE PB
Y/C MIX
SHARPNESS CONT
IC701
Y PROCESS
IC701 AN3231K
NOISE CANC
LOGIC
DROPOUT COMP.
L.P.F
AGC
SYNC SEP
AGC DET
EE PB
C703 4.7 50V
R703 8.2k
R701 330k
R755 2.2M
C702 0.01
C704 22 25V
C705 0.1
L701 10µH
C701 0.0033
RV701 4.7k AGC
R704 6.8k
R778 1.2k
R781 6.8k
CN705 22P
N.C.
ME SECAM
V PB
COMP SYNC
N.C.
N.C.
N.C.
HEAD SEL
REC P
REC
SP/LP
LP HEAD
RF SWP
AMS
EDIT
SHP
Q.VD
SW 5V
GND
SW 9V
PB C
CN708 7P
N.C.
REC
REC.P
SW30
EP/SP
A/M/S
SLOW
TO:RP63
CN704 11P
SW9V
GND
PB FM
REC FM
GND
GND
REC COL
PB COL
SW 5V
COLOR ROT
SYNC
CN703 6P
V OUT
GND
SECAM ACK
SW 5V
V IN
GND (V)
TO MA-138 BOARD CN105 (See Page 101)
TO RP-63 BOARD CN803 (See Page 91)
TO RP-63 BOARD CN802 (See Page 91)
TO OS-13 BOARD CN401 (See Page 107)
NO MARK:REC/PB MODE
( ):REC MODE
< >:PB MODE

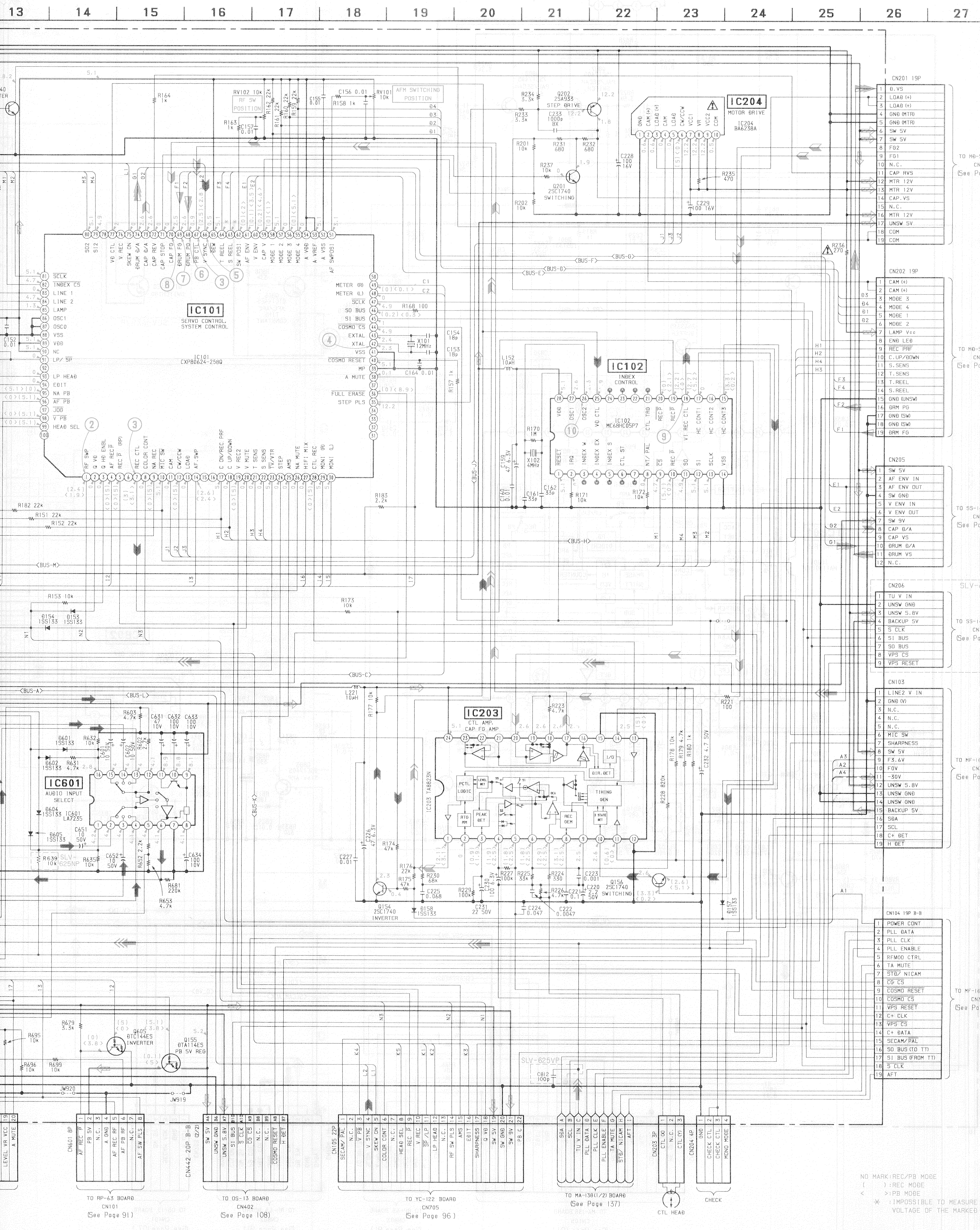

13
14
15
16
17
18
19
20
21
22
23
24
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
SW_5V
V_PB
PB_C (IC)
SHARPNESS
EDIT
VIDEO (OUT)
SP/LP
PB_Y
REC_Y
9V
IC701
Y PROCESS
IC701
AN3231K
IC702
1H DELAY
CCD
IC702
CXL5003P
Q722
DTC144ES
NOISE
CANCEL
SW
Q704
DTC144ES
PEAKING SW
Q723
DTC144ES
PEAKING SW
Q721
2SC1740S
Y-FM
BUFFER
Q705
2SC1740S
CCD DRIVE
Q706
2SA933S
CCD DRIVE
Q711
2SA933S
BUFFER
Q702
2SA933S
BUFFER
D705
1SS133T
D701
1SS133T
FL701
IN
OUT
AMP
MUTE
SHARPNESS
CONT
H.P.F
LIMITER
L.P.F
Y/C
MIX
NOISE CANCEL
LOGIC
FM DEMOD
MIX
EQ
EMV
DET
DROP
DET
DELAY
DROPOUT
COMP.
DETAIL
LINEALITY
NONLINEAR
DE-EMPHASIS
NONLINEAR
EMPHASIS
MAIN
EMPHASIS
DETECT
SYNC SEP
AGC
DET
ATTENUATOR
VIDEO
AMP
CLAMP
DET
CLIP
EE
PB
RV708 10k
PB Y
LEVEL
RV702
DEVIATION
RV703
CARRIER SET
RV710 1k
Y FM LEVEL
RV705 22k
WHITE
CLIP
RV704
DARK
CLIP
RV701
4.7k
AGC
RV707 1k
CCD
LEVEL
R761 47k
R730 47k
R729 47k
R763 3.3k
C737 0.01
C770 220p
R720 3.9k
L706 100μH
R718 2.7k
R780 10k
R726 820
C734 470p
C792 0.01
C728 39p
C763 4.7 50V
L707 100μH
R725 390
C732 82p
R722 1.5k
R723 5.6k
C733 33p
L704 82μH
L705 180μH
R714 4.7k
R702 2.2k
C736 68p
R727 2.2k
C785 0.01
R779 470
C716 0.1
C730 0.01
C731 100 6.3V
C739 120p
R731 470
C791 15p
R717 1.8k
C726 0.01
C725 0.01
C723 0.01
R728 560k
C738 2.2 50V
C735 0.1
R724 1.5k
R719 5.6k
C727 0.01
C724 0.022
C703 4.7 50V
R703 8.2k
C706 4.7 50V
C707 4.7 50V
C710 0.047
C712 390p
R707 1.3k
R705 5.6k
C711 330p
R708 300
R712 4.7k
R777 1k
C782 68p
L726 180μH
R774 33k
C780 0.1
R775 33k
C783
R773 1k
C773 0.01
330p (SLV-625/NC/NP/UB)
390p (SLV-625VP)
R701 330k
C702 0.01
C704 22 25V
R755 2.2M
C705 0.1
R741 1k
C790 0.1
C708 10p
R706 2.2k
C713 820p
R709 3.3k
C714 0.01
C715 0.01
L701 10μH
C701 0.0033
R704 6.8k
R781 6.8k
R778 1.2k
C741 47 10V
C709 100 6.3V
R710 56k
L708 100μH
R713 2.2k
C718 4.7 50V
L709 100μH
R734 27k
R736 220
C744 47 10V
C743 0.1
R737 470
R735 10k
R738 100
R744 1M
C749 0.1
C746 0.01
C751 0.1
C747 0.1
C750 0.01
C753 47 10V
R754 390
L712 12μH
L713 22μH
C754 33p
C755 120p
C756 220p

NO MARK:REC/PB MODE
(   ):REC MODE
<   >:PB MODE

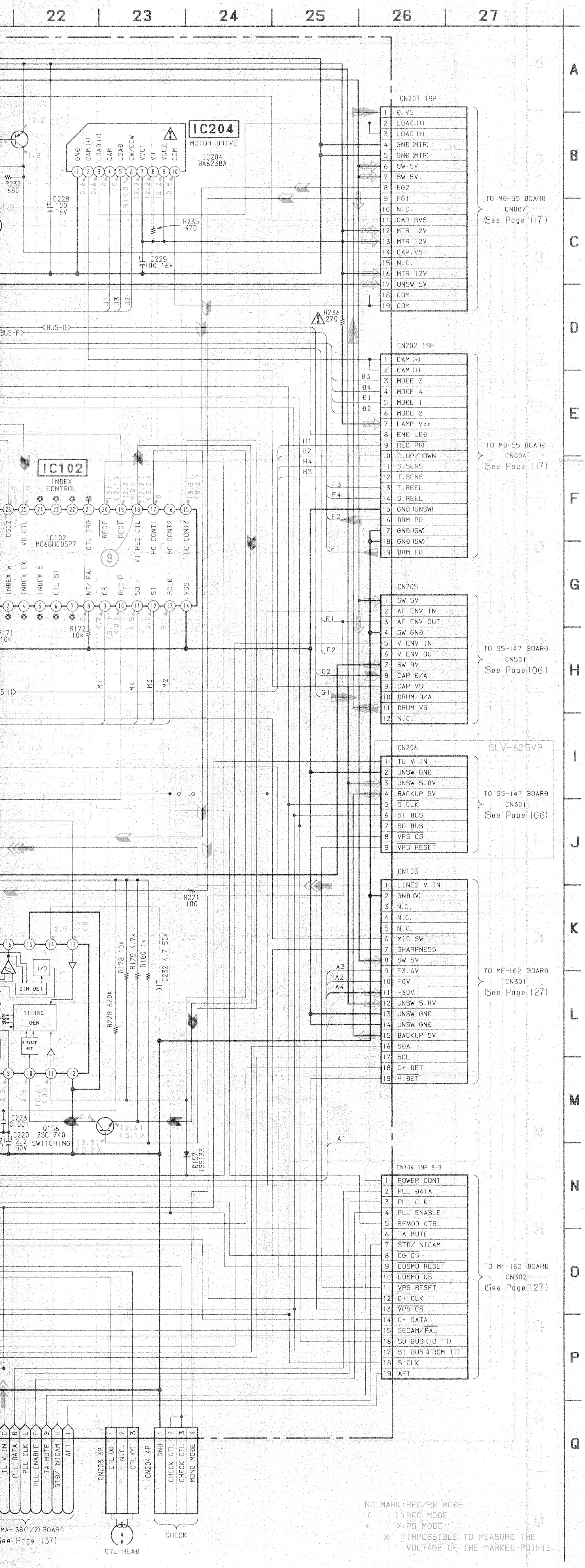
MA-138(SERVO, SYSTEM CONTROL, AUDIO) SCHEMATIC DIAGRAM

—Ref. No. MA-138 BOARD: 3,000 series—


MA-138 BOARD (1/2)
CN102 9P
MTR GND
MTR GND
MTR 12V
MTR 12V
UNSW GND
UNSW 12V
DC -30V
DC 4.3V
DC 0V
TO POWER SUPPLY CN712 (See Page 146)
CN101 8P
POWER CONT
UNSW GND
DC 35V
UNSW 6V
SW GND
SW 5V
SW 9V
A GND
TO POWER SUPPLY CN711 (See Page 146)
CN605 3P
FE HEAD (X)
N.C.
GND
FULL ERASE HEAD
CN606 3P
BIAS (+)
N.C.
BIAS (-)
CHECK
CN604 4P
A HEAD (X)
A HEAD (Y)
GND
A.E HEAD
NORMAL AUDIO HEAD
AUDIO ERASE HEAD
CNJ103
EURO-AV
SLV-625/NC/UB/VP
CNJ102
AUDIO
VIDEO
LINE OUT
CN801 20P
TO CP-55 BOARD CN001 (See Page 138)
SLV-625NP
CN802 8P
TO CP-55 BOARD CN002 (See Page 138)
CN442 20P (1/2)
TO DS-13 BOARD CN402 (See Page 108)
T702
T701
Q703 2SB734-4 SWITCHING
Q702 2SD774-34 ERASE OSC
Q701 2SD774-34 BIAS/ERASE OSC
RV751 220k RECORDING BIAS
IC701 NORMAL AUDIO REC/PB AMP
IC801 INPUT SELECT IC801 BA7021
RF501 RF MODULATOR
TO MA138 (1/2) BOARD TU501 (See Page 136)
AERIAL
Q802,803 RF MOD CTRL SWITCH
Q805 2SA933 SWITCHING
Q804 DTC144ES SWITCHING
IC603 LEVEL DET IC603 BA6138
Q601 2SC1740 MIC POWER
IC602 MIC/NOR SELECT IC602 M5201L
IC601 AUDIO INPUT SELECT IC601 LA7235
Q151 2SC1740 INVERTER
D152 MTZJ-6.8
RFU-2017: SLV-625/NC/NP/VP
RFU-2024: SLV-625UB
HF/NOR DET
RV601 2.2k
SCLK
INDEX CS
LINE 1
LINE 2
LAMP
OSC1
OSCO
VSS
VDD
NC
LP/SP
LP HEAD
EDIT
NA PB
AF PB
JOG
V PB
HEAD SEL
TO MA-138(2/2) BOARD (See Page 137)
CN608 3P
CHECK
CN607 6P
TO MF-162 BOARD CN306 (See Page 125)
CN602 14P
TO HF-22 BOARD CN202 (See Page 123)
CN603 20P
TO HF-22 BOARD CN201 (See Page 123)


IC101
SERVO CONTROL, SYSTEM CONTROL
IC101 CXP80624-258Q
IC102
INDEX CONTROL
IC102 MC68HC05P7
IC203
CTL AMP, CAP FG AMP
IC203 TA8823N
IC204
MOTOR DRIVE
IC204 BA6238A
IC601
AUDIO INPUT SELECT
IC601 LA7235
Q201 2SC1740 SWITCHING
Q202 2SA933 STEP DRIVE
Q154 2SC1740 INVERTER
Q156 2SC1740 SWITCHING
Q605 DTC144ES INVERTER
Q155 DTA114ES PB 5V REG
X101 12MHz
X102 4MHz
CN201 19P
CN202 19P
CN205
CN206
CN103
CN104 19P B-B
CN601 8P
CN442 20P B-B (2/2)
CN105 22P
CN203 3P
CN204 4P
TO RP-63 BOARD CN101 (See Page 91)
TO OS-13 BOARD CN402 (See Page 108)
TO YC-122 BOARD CN705 (See Page 96)
TO MA-138(1/2) BOARD (See Page 137)
CTL HEAD
CHECK
SLV-625NP
SLV-625VP
BUS-A
BUS-C
BUS-D
BUS-E
BUS-F
BUS-G
BUS-H
BUS-J
BUS-K
BUS-L
BUS-M
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27

NO MARK:REC/PB MODE
(   ):REC MODE
<   >:PB MODE
✳ :IMPOSSIBLE TO MEASURE
VOLTAGE OF THE MARKED


22
23
24
25
26
27
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
IC204
MOTOR DRIVE
IC204 BA6238A
GND
CAM (+)
LOAD (+)
CAM
LOAD
CW/CCW
VCC1
VR
VCC2
COM
R232 680
C228 100 16V
R235 470
C229 100 16V
J1
J3
J2
R236 270
<BUS-F>
<BUS-G>
CN201 19P
1 D.VS
2 LOAD (+)
3 LOAD (+)
4 GND (MTR)
5 GND (MTR)
6 SW 5V
7 SW 5V
8 FG2
9 FG1
10 N.C.
11 CAP RVS
12 MTR 12V
13 MTR 12V
14 CAP.VS
15 N.C.
16 MTR 12V
17 UNSW 5V
18 COM
19 COM
TO MD-55 BOARD CN007 (See Page 117)
CN202 19P
1 CAM (+)
2 CAM (+)
3 MODE 3
4 MODE 4
5 MODE 1
6 MODE 2
7 LAMP Vcc
8 END LED
9 REC PRF
10 C.UP/DOWN
11 S.SENS
12 T.SENS
13 T.REEL
14 S.REEL
15 GND (UNSW)
16 DRM PG
17 GND (SW)
18 GND (SW)
19 DRM FG
TO MD-55 BOARD CN004 (See Page 117)
IC102
INDEX CONTROL
IC102 MC68HC05P7
OSC2
VD CTL
CTL TRG
REC P
VI REC CTL
HC CONT1
HC CONT2
HC CONT3
INDEX W
INDEX EX
INDEX S
CTL ST
NT/PAL
CS
REC P
SO
SI
SCLK
VSS
R171 10k
R172 10k
M1
M4
M3
M2
CN205
1 SW 5V
2 AF ENV IN
3 AF ENV OUT
4 SW GND
5 V ENV IN
6 V ENV OUT
7 SW 9V
8 CAP D/A
9 CAP VS
10 DRUM D/A
11 DRUM VS
12 N.C.
TO SS-147 BOARD CN501 (See Page 106)
CN206
SLV-625VP
1 TU V IN
2 UNSW GND
3 UNSW 5.8V
4 BACKUP 5V
5 S CLK
6 SI BUS
7 SO BUS
8 VPS CS
9 VPS RESET
TO SS-147 BOARD CN301 (See Page 106)
R221 100
CN103
1 LINE2 V IN
2 GND (V)
3 N.C.
4 N.C.
5 N.C.
6 MIC SW
7 SHARPNESS
8 SW 5V
9 F3.6V
10 FDV
11 -30V
12 UNSW 5.8V
13 UNSW GND
14 UNSW GND
15 BACKUP 5V
16 SDA
17 SCL
18 C+ DET
19 H DET
TO MF-162 BOARD CN301 (See Page 127)
DIR. DET
TIMING GEN
3 STATE DET
R178 10k
R179 4.7k
R180 1k
R228 820k
C232 4.7 50V
C223 0.001
C220 2.2 50V
Q156 2SC1740 SWITCHING
D157 1SS133
CN104 19P B-B
1 POWER CONT
2 PLL DATA
3 PLL CLK
4 PLL ENABLE
5 RFMOD CTRL
6 TA MUTE
7 STB/ NICAM
8 CG CS
9 COSMO RESET
10 COSMO CS
11 VPS RESET
12 C+ CLK
13 VPS CS
14 C+ DATA
15 SECAM/PAL
16 SO BUS (TO TT)
17 SI BUS (FROM TT)
18 S CLK
19 AFT
TO MF-162 BOARD CN302 (See Page 127)
TU V IN
PLL DATA
PLL CLK
PLL ENABLE
TA MUTE
STB/ NICAM
AFT
CN203 3P
CTL (X)
N.C.
CTL (Y)
CN204 4P
GND
CHECK CTL
CHECK CTL
MONO MODE
CTL HEAD
CHECK
MA-138(1/2) BOARD
(See Page 137)

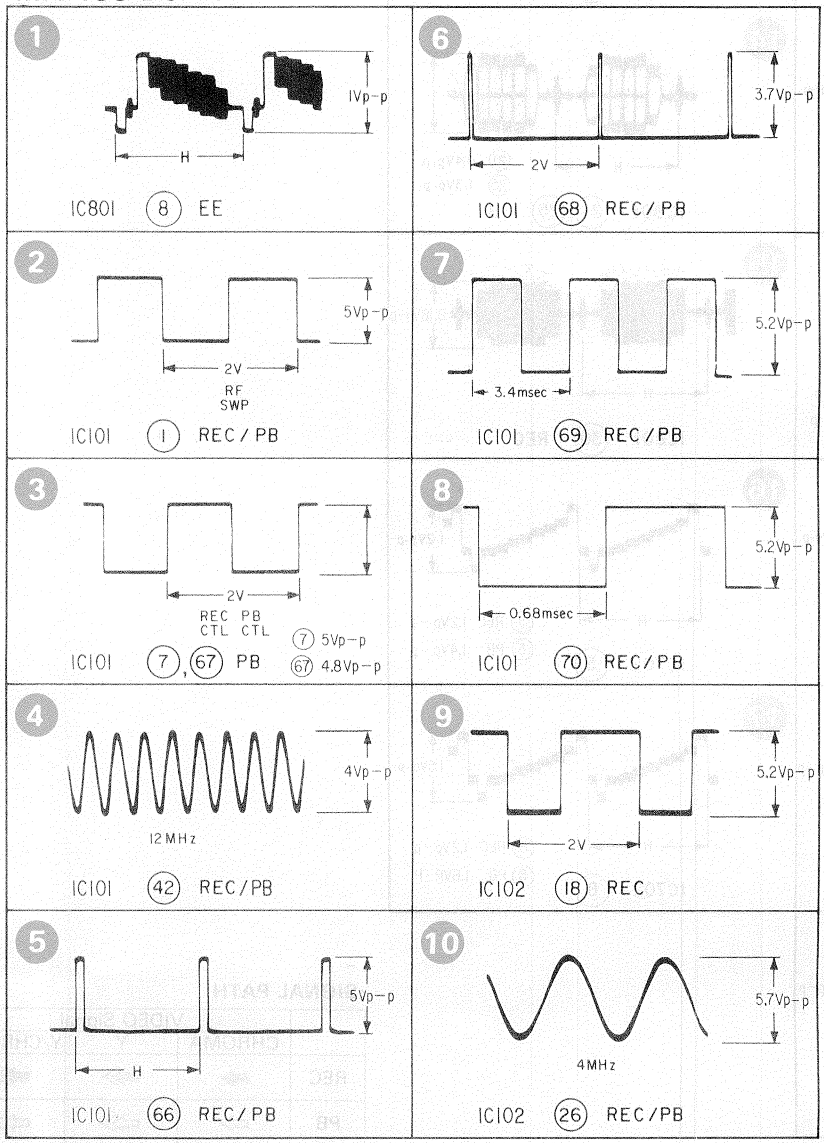
NO MARK:REC/PB MODE
(   ):REC MODE
<   >:PB MODE
✳ :IMPOSSIBLE TO MEASURE THE VOLTAGE OF THE MARKED POINTS.

·SIGNAL PATH

	VIDEO Signal			AUDIO Signal
	CHROMA	Y	Y/CHROMA	
REC			⇛	➡
PB			⇛	⇨

	REC	REC/PB	PB
Drum speed servo		▷	
Drum pilase serbo		▷	
Drum servo (speed and phase)		⇛	
Capstan speed servo		▷	
Capstan phase servo		⇛	
Capstan servo (speed and phase)		⇛	
Ref. signal	➤		

MA-138 BOARD



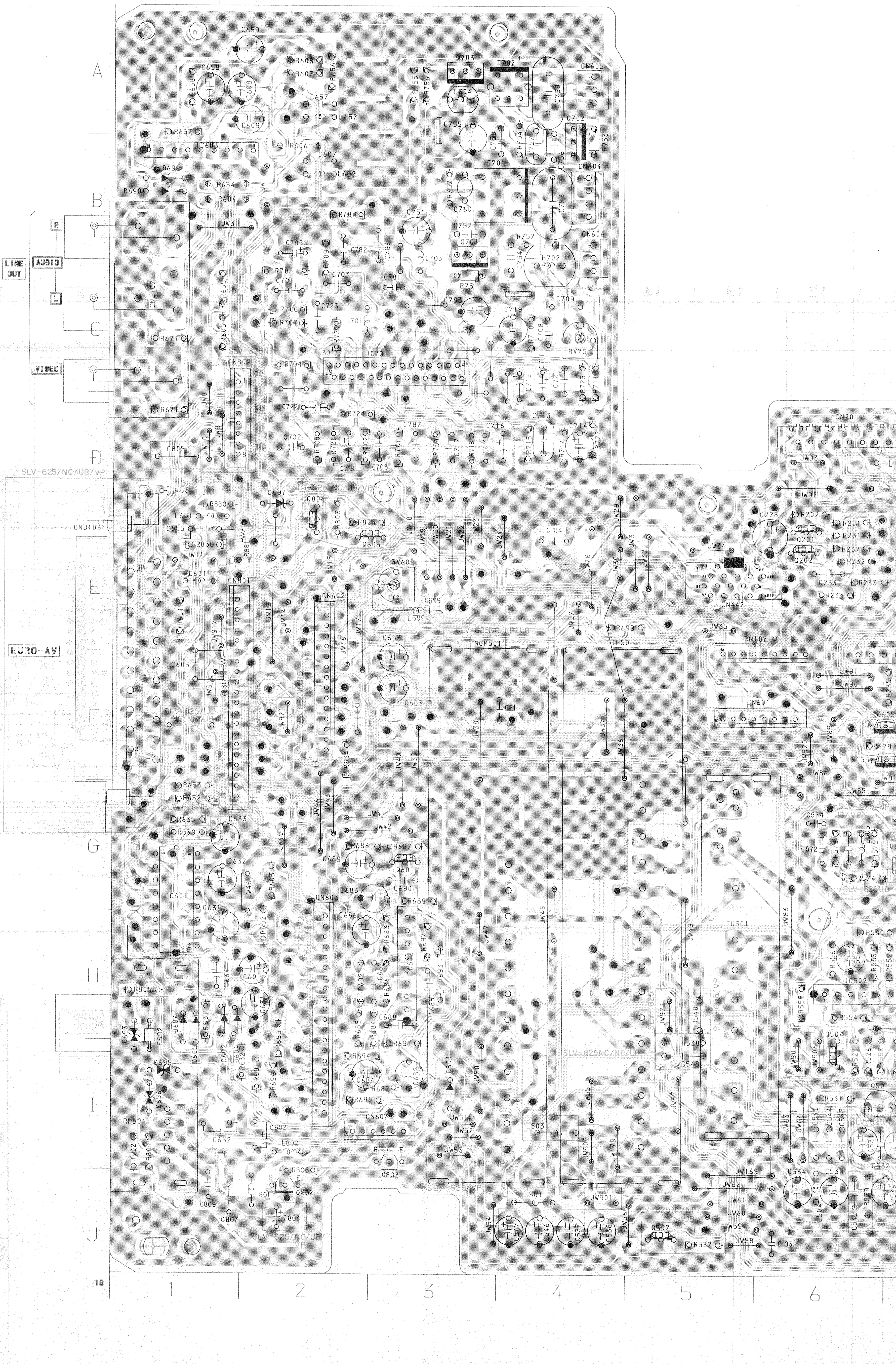
MA-138(SERVO, SYSTEM CONTROL, AUDIO) PRINTED WIRING BOARD

—Ref. No. MA-138 BOARD: 3,000 series—

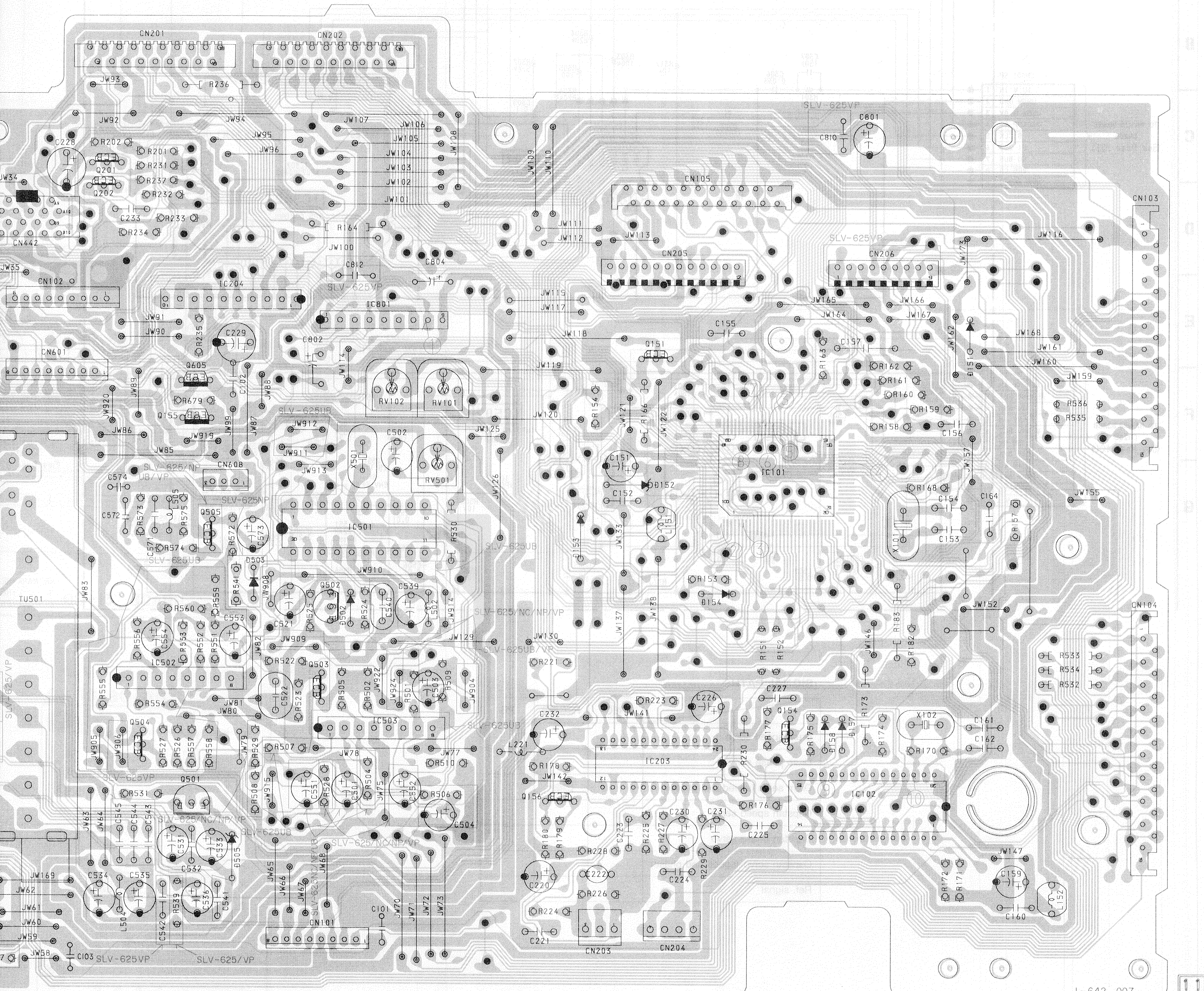
MA-138 BOARD

CN101	J-7
CN102	F-5
CN103	F-13
CN104	H-13
CN105	E-10
CN201	D-6
CN202	D-7
CN203	J-9
CN204	J-10
CN205	E-10
CN206	F-11
CN442	E-5
CN601	F-5
CN602	F-2
CN603	H-2
CN604	B-4
CN605	A-4
CN606	C-4
CN607	I-3
CN608	G-7
CN801	F-1
CN802	D-1
CNJ102	C-1
CNJ103	E-1
D151	F-12
D152	G-10
D153	G-9
D154	G-10
D157	H-11
D158	H-11
D502	H-8
D503	H-7
D505	I-7
D601	H-1
D602	H-1
D604	H-1
D605	H-1
D690	B-1
D691	B-1
D692	H-1
D693	H-1
D695	I-1
D696	I-1
D697	D-2
D801	I-3
IC101	G-11
IC102	I-11
IC203	I-10
IC204	F-7
IC501	G-8
IC502	H-6
IC503	H-8
IC601	G-1
IC602	H-3
IC603	B-1
IC701	C-3
IC801	F-8
Q151	F-10
Q154	H-11
Q155	F-6
Q156	I-9
Q201	E-6
Q202	E-6
Q501	I-6
Q502	H-7
Q503	H-7
Q504	I-6
Q505	G-7
Q507	J-5
Q601	G-3
Q605	F-6
Q701	B-3
Q702	B-4
Q703	A-3
Q802	J-2
Q803	I-3
Q804	D-2
Q805	E-2
RV101	F-8
RV102	F-8
RV501	G-8
RV601	E-3
RV751	C-4

MA-138 BOARD



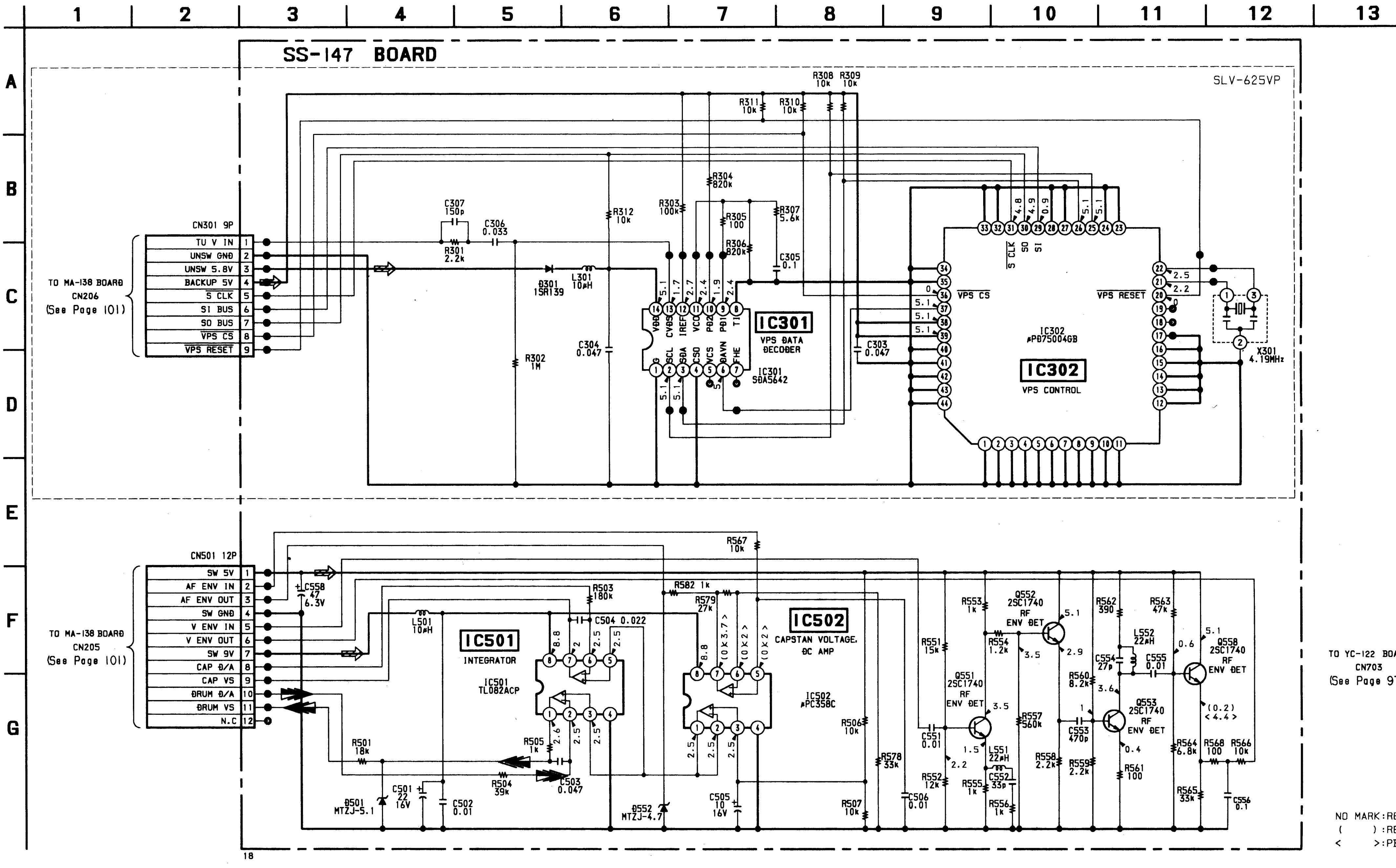
LINE OUT
AUDIO
R
L
VIDEO
EURO-AV
CNJ102
CNJ103
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
18
SLV-625/NC/UB/VP
SLV-625NC/NP/UB
SLV-625/VP
SLV-625VP
IC601
IC701
CN442
NCM501
TUS01
IF501
CN201
CN602
CN603
CN607
CN801
CN802
RV601
RV751



CN201
CN202
CN102
CN601
CN442
CN608
CN101
CN105
CN205
CN206
CN103
CN104
CN203
CN204
IC204
IC801
IC501
IC502
IC503
IC101
IC203
IC102
TU501
RV102
RV101
RV501
X501
X101
X102
Q201
Q202
Q605
Q155
Q505
Q502
Q503
Q504
Q501
Q151
Q154
Q156
D152
D154
D157
D158
D503
D502
D505
R236
R164
R202
R201
R231
R237
R232
R233
R234
R235
R679
C228
C229
C233
C812
C804
C802
C810
C801
C155
C157
C152
C151
C154
C153
C156
C164
C502
C574
C572
C573
C539
C540
C553
C554
C551
C552
C521
C522
C503
C504
C531
C532
C533
C534
C535
C536
C541
C542
C543
C544
C545
C101
C103
C220
C221
C222
C223
C224
C225
C226
C227
C230
C231
C232
C159
C160
C161
C162
L221
L502
L152
JW92
JW93
JW94
JW95
JW96
JW100
JW101
JW102
JW103
JW104
JW105
JW106
JW107
JW108
JW109
JW110
JW111
JW112
JW113
JW115
JW116
JW117
JW118
JW119
JW120
JW125
JW126
JW129
JW130
JW141
JW142
JW146
JW147
JW152
JW155
JW157
JW159
JW160
JW161
JW162
JW164
JW165
JW166
JW167
JW168
JW169
JW910
JW911
JW912
JW913
JW919
JW920
SLV-625VP
SLV-625UB
SLV-625NP
SLV-625/NC/NP/VP
SLV-625UB/VP
SLV-625/VP
1-642-007-
11
6
7
8
9
10
11
12
13

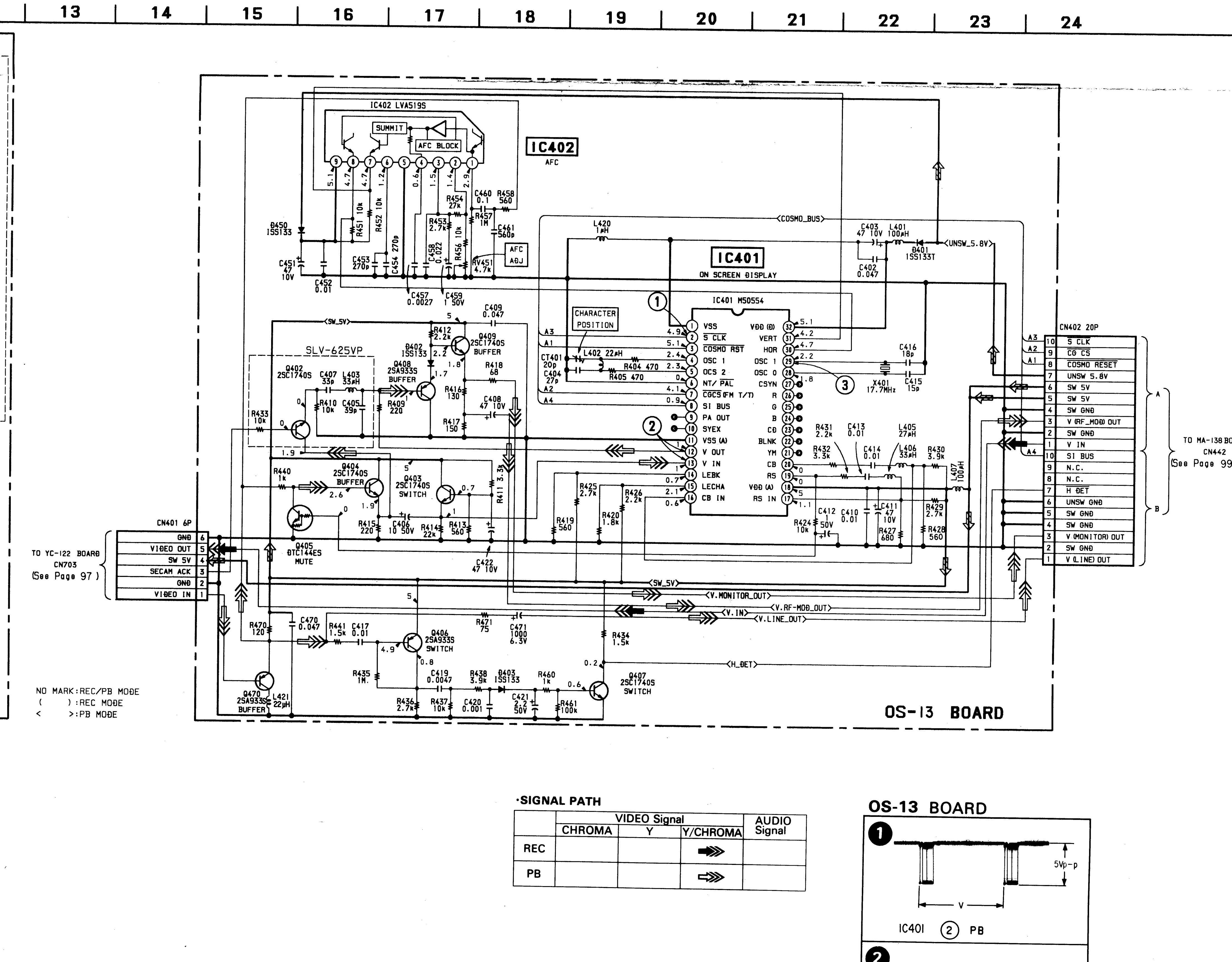
SS-147(VPS, SERVO), OS-13(OSD) SCHEMATIC DIAGRAMS

—Ref. No. SS-147, OS-13 BOARD: 1,000 series—


1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
SS-147 BOARD
SLV-625VP
CN301 9P
TU V IN
UNSW GND
UNSW 5.8V
BACKUP 5V
S CLK
SI BUS
SO BUS
VPS CS
VPS RESET
TO MA-138 BOARD CN206 (See Page 101)
R308 10k
R309 10k
R311 10k
R310 10k
R304 820k
R303 100k
R305 100
R306 820k
R307 5.6k
R312 10k
C307 150p
C306 0.033
R301 2.2k
D301 1SR139
L301 10µH
C305 0.1
R302 1M
C304 0.047
C303 0.047
IC301
VPS DATA DECODER
IC301 SDA5642
IC302
VPS CONTROL
IC302 µPD75004GB
VPS CS
VPS RESET
S CLK
SO
SI
X301 4.19MHz
CN501 12P
SW 5V
AF ENV IN
AF ENV OUT
SW GND
V ENV IN
V ENV OUT
SW 9V
CAP D/A
CAP VS
DRUM D/A
DRUM VS
N.C
TO MA-138 BOARD CN205 (See Page 101)
C558 47 6.3V
L501 10µH
R503 180k
C504 0.022
IC501
INTEGRATOR
IC501 TL082ACP
R582 1k
R579 27k
R567 10k
IC502
CAPSTAN VOLTAGE, DC AMP
IC502 µPC358C
R501 18k
R505 1k
R504 39k
C503 0.047
C501 22 16V
C502 0.01
D501 MTZJ-5.1
D552 MTZJ-4.7
C505 10 16V
R506 10k
R507 10k
R578 33k
C506 0.01
C551 0.01
R551 15k
R553 1k
Q552 2SC1740 RF ENV DET
R554 1.2k
Q551 2SC1740 RF ENV DET
R552 12k
R555 1k
L551 22µH
C552 33p
R556 1k
R557 560k
R562 390
R563 47k
L552 22µH
C554 27p
C555 0.01
R560 8.2k
C553 470p
R558 2.2k
R559 2.2k
Q553 2SC1740 RF ENV DET
R561 100
Q558 2SC1740 RF ENV DET
R564 6.8k
R568 100
R566 10k
R565 33k
C556 0.1
TO YC-122 BO
CN703
(See Page 9
NO MARK: RE
( ) : RE
< > : PE
18

·SIGNAL PATH

	REC	REC/PB	PB
Drum speed servo			
Drum pilase serbo			
Drum servo (speed and phase)		⇨	
Capstan speed servo			
Capstan phase servo			
Capstan servo (speed and phase)			
Ref. signal			



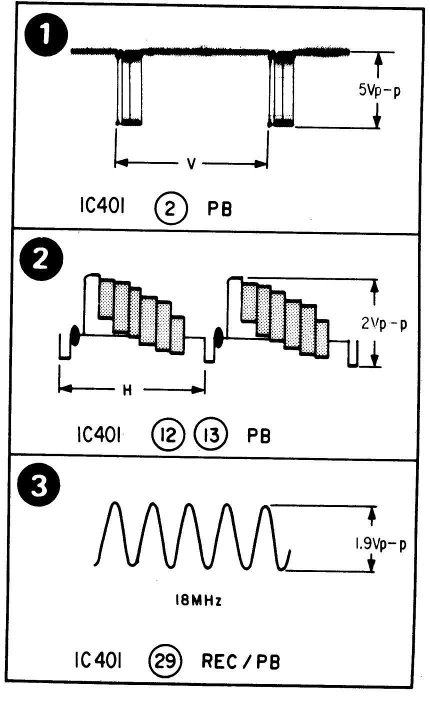
13
14
15
16
17
18
19
20
21
22
23
24
IC402 LVA519S
SUMMIT
AFC BLOCK
IC402
AFC
AFC ADJ
RV451 4.7k
Q450 1SS133
C451 47 10V
C452 0.01
C453 270p
C454 270p
C457 0.0027
C459 1 50V
C458 0.022
R451 10k
R452 10k
R453 2.7k
R454 27k
R456 10k
R457 1M
C460 0.1
R458 560
C461 560p
<COSMO_BUS>
L420 1μH
IC401
ON SCREEN DISPLAY
IC401 M50554
C403 47 10V
L401 100μH
D401 1SS133T
<UNSW_5.8V>
C402 0.047
CHARACTER POSITION
CT401 20p
C404 27p
L402 22μH
R404 470
R405 470
VSS
S CLK
COSMO RST
OSC 1
OSC 2
NT/ PAL
CGCS(FM T/T)
SI BUS
PA OUT
SYEX
VSS (A)
V OUT
V IN
LEBK
LECHA
CB IN
VDD (D)
VERT
HOR
OSC 1
OSC 0
CSYN
R
G
B
CO
BLNK
YM
CB
RS
VDD (A)
RS IN
C416 18p
X401 17.7MHz
C415 15p
R431 2.2k
C413 0.01
L405 27μH
R432 3.3k
C414 0.01
L406 33μH
R430 3.9k
L407 100μH
C412 1 50V
C410 0.01
C411 47 10V
R429 2.7k
R424 10k
R427 680
R428 560
R425 2.7k
R426 2.2k
R420 1.8k
R419 560
SLV-625VP
Q402 2SC1740S
C407 33p
L403 33μH
R410 10k
C405 39p
R433 10k
<SW_5V>
R412 2.2k
D402 1SS133
Q408 2SA933S BUFFER
Q409 2SC1740S BUFFER
C409 0.047
R418 68
R416 130
R409 220
C408 47 10V
R417 150
Q404 2SC1740S BUFFER
Q403 2SC1740S SWITCH
R440 1k
Q405 DTC144ES MUTE
R415 220
C406 10 50V
R414 22k
R413 560
R411 3.3k
C422 47 10V
CN401 6P
GND
VIDEO OUT
SW 5V
SECAM ACK
GND
VIDEO IN
TO YC-122 BOARD CN703 (See Page 97)
CN402 20P
S CLK
CG CS
COSMO RESET
UNSW 5.8V
SW 5V
SW 5V
SW GND
V (RF_MOD) OUT
SW GND
V IN
SI BUS
N.C.
N.C.
H DET
UNSW GND
SW GND
SW GND
V (MONITOR) OUT
SW GND
V (LINE) OUT
A
B
TO MA-138 BO CN442 (See Page 99
<SW_5V>
<V.MONITOR_OUT>
<V.RF-MOD_OUT>
<V.IN>
<V.LINE_OUT>
<H_DET>
R470 120
C470 0.047
R441 1.5k
C417 0.01
Q406 2SA933S SWITCH
R471 75
C471 1000 6.3V
R434 1.5k
R435 1M
C419 0.0047
R438 3.9k
D403 1SS133
R460 1k
Q407 2SC1740S SWITCH
Q470 2SA933S BUFFER
L421 22μH
R436 2.7k
R437 10k
C420 0.001
C421 2.2 50V
R461 100k
OS-13 BOARD

NO MARK : REC/PB MODE
( ) : REC MODE
< > : PB MODE

·SIGNAL PATH

	VIDEO Signal			AUDIO Signal
	CHROMA	Y	Y/CHROMA	
REC			➡	
PB			⇨	

OS-13 BOARD



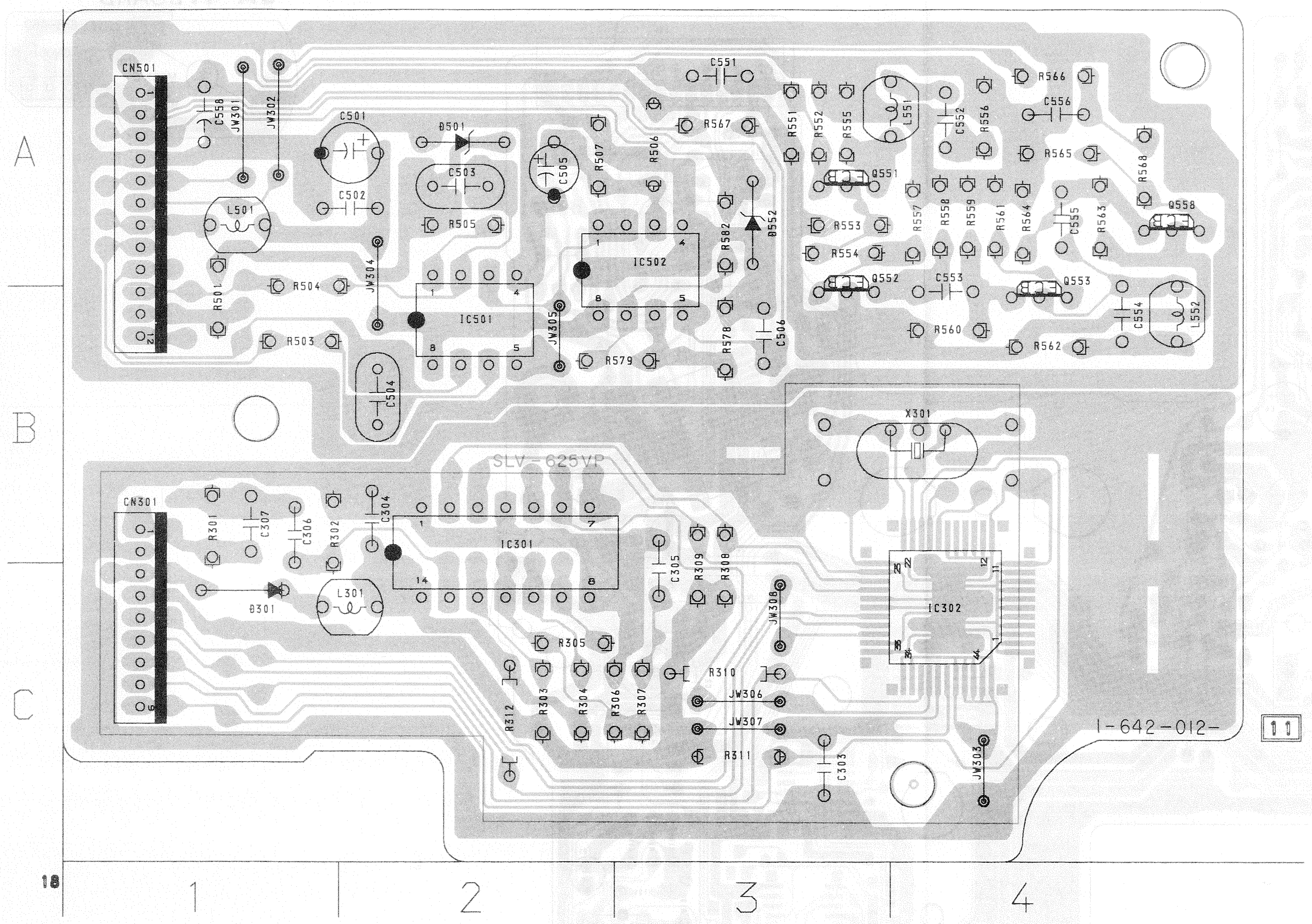
SS-147(VPS, SERVO), OS-13(OSD) PRINTED WIRING BOARDS

—Ref. No. SS-147, OS-13 BOARDS: 1,000 series—

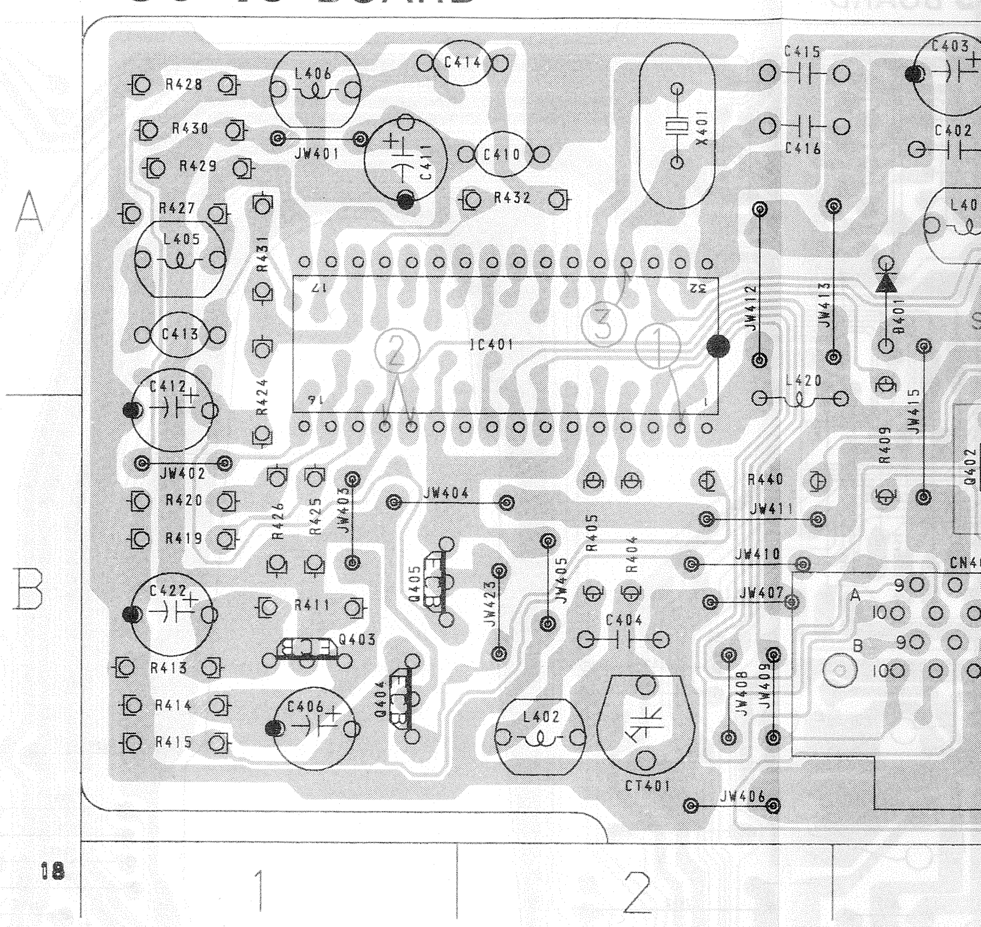
SS-147 BOARD

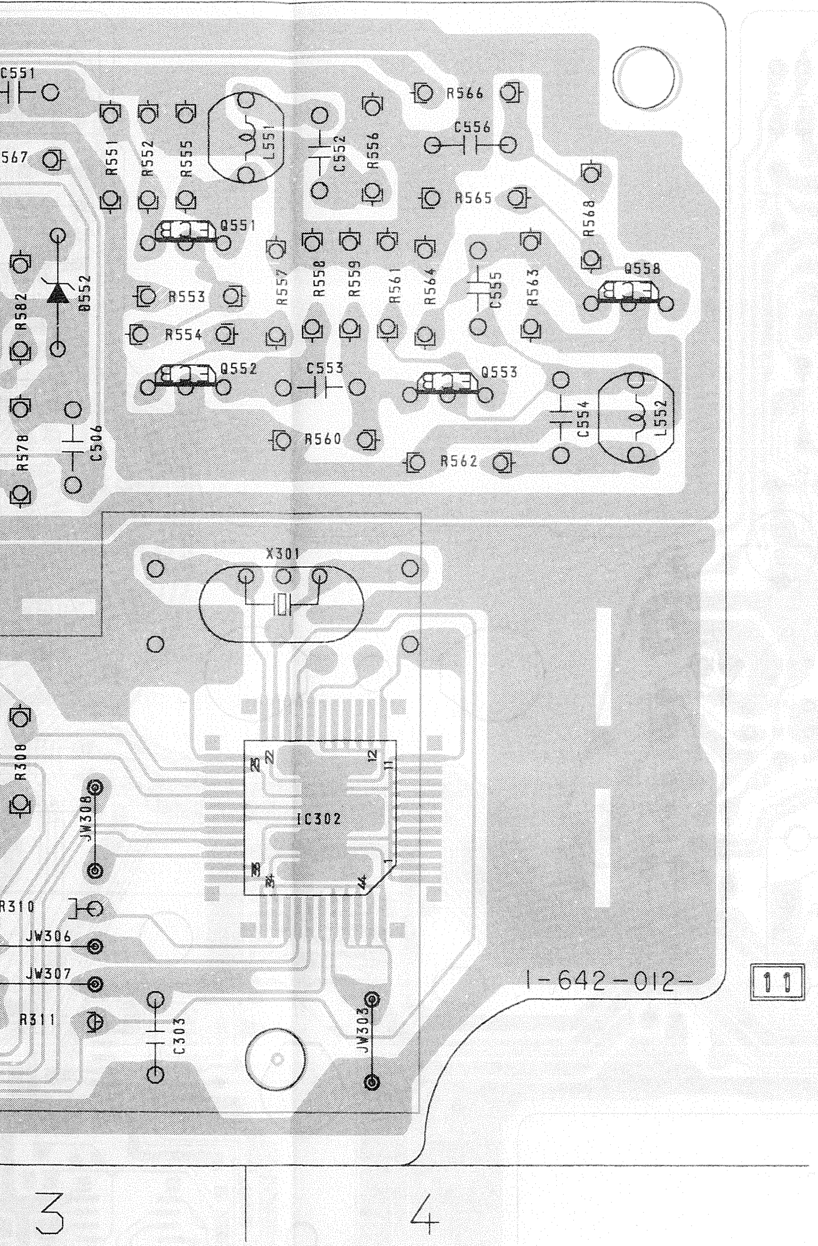
CN301	C-1
CN501	A-1
D301	C-1
D501	A-2
D552	A-3
IC301	C-2
IC302	C-4
IC501	B-2
IC502	B-2
Q551	A-3
Q552	B-3
Q553	B-4
Q558	A-4

SS-147 BOARD

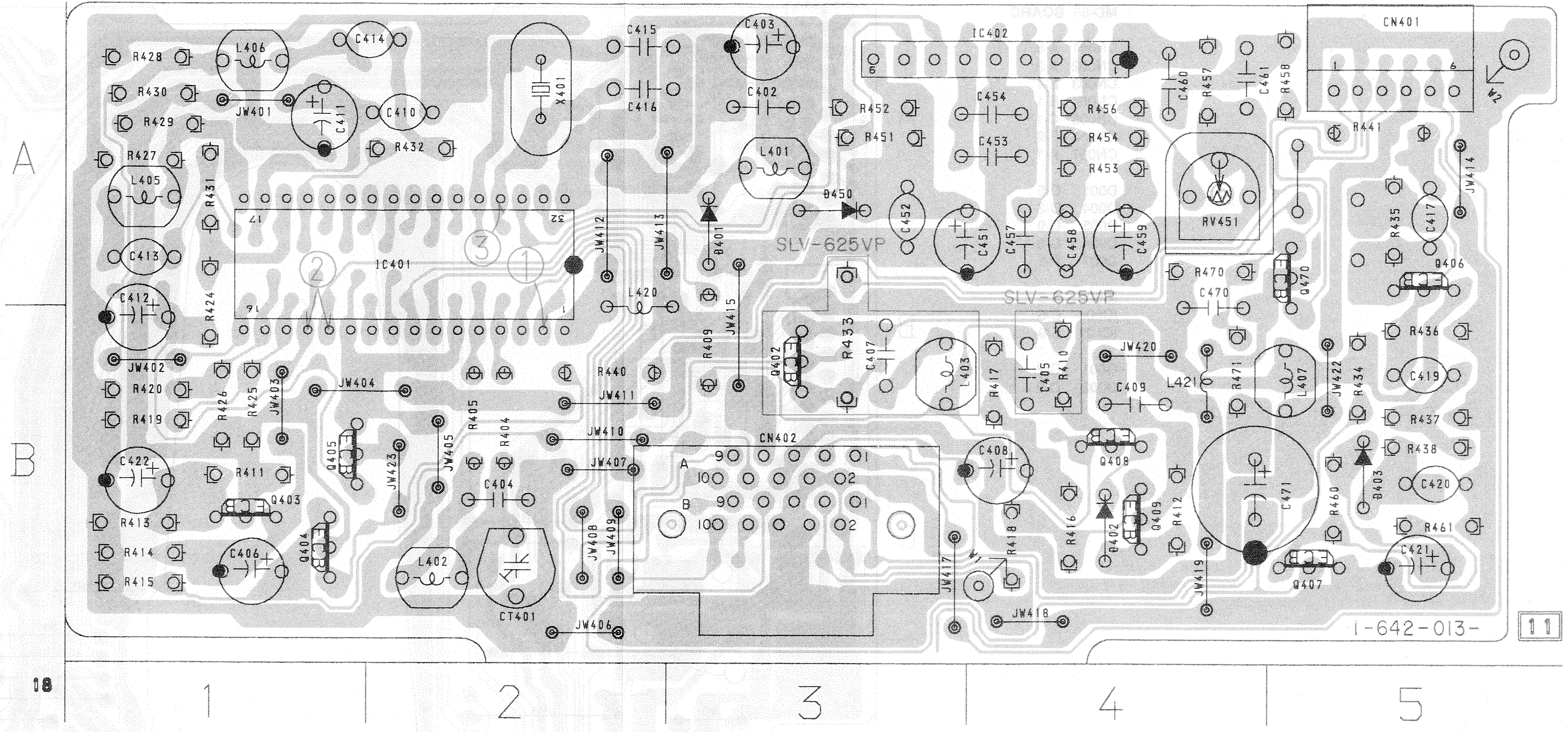

A
B
C
1
2
3
4
18
CN501
C558
JW301
JW302
C501
D501
C503
C502
C505
R507
R506
C551
R567
R551
R552
R555
L551
C552
R556
R566
C556
R565
R568
Q558
Q551
R505
L501
R501
R504
JW304
IC501
R503
C504
IC502
JW305
R579
R582
D552
R578
C506
R553
R554
Q552
R557
R558
R559
R561
R564
C555
R563
C553
Q553
C554
L552
R560
R562
X301
SLV-625VP
CN301
R301
C307
C306
R302
C304
IC301
D301
L301
C305
R309
R308
JW308
IC302
R305
R312
R303
R304
R306
R307
R310
JW306
JW307
R311
C303
JW303
1-642-012-
11

OS-13 BOARD


A
B
1
2
18
R428
L406
C414
C415
C403
R430
JW401
C411
C410
X401
C416
C402
R429
R432
R427
L405
R431
IC401
JW412
JW413
D401
C413
C412
R424
L420
JW415
R409
JW402
R420
R419
R426
R425
JW403
JW404
R440
JW411
R405
R404
JW410
C422
Q405
JW423
JW405
JW407
R411
Q403
C404
R413
Q404
L402
JW408
JW409
R414
C406
R415
CT401
JW406


C551
R567
R551
R552
R555
L551
C552
R556
R566
C556
R565
R568
Q551
Q558
R582
D552
R553
R557
R558
R559
R561
R564
C555
R563
R554
Q552
C553
Q553
C554
L552
R578
C506
R560
R562
X301
IC302
R308
JW308
R310
JW306
JW307
R311
C303
JW303
1-642-012-
11
3
4
18

OS-13 BOARD


A
B
R428
L406
C414
C415
C403
IC402
CN401
R430
JW401
C411
C410
X401
C416
C402
R452
C454
R456
C460
R457
C461
R458
R429
R432
R451
C453
R454
R441
JW414
R427
L401
R453
L405
R431
D450
C452
C451
C457
C458
C459
RV451
R435
C417
D401
SLV-625VP
C413
IC401
JW412
JW413
R470
Q470
Q406
C412
R424
L420
C470
R409
JW415
R433
Q402
C407
L403
R417
C405
R410
JW420
L421
R471
L407
JW422
R434
R436
C419
JW402
R426
R425
JW403
JW404
R405
R404
R440
JW411
C409
R437
R420
R419
JW410
CN402
C408
Q408
R438
C422
Q405
JW423
JW405
JW407
D403
C420
R411
Q403
C404
JW408
JW409
R418
R416
D402
Q409
R412
C471
R460
R413
Q404
C406
L402
CT401
JW417
JW419
R461
R414
C421
R415
Q407
JW406
JW418
1-642-013-
11
1
2
3
4
5

OS-13 BOARD

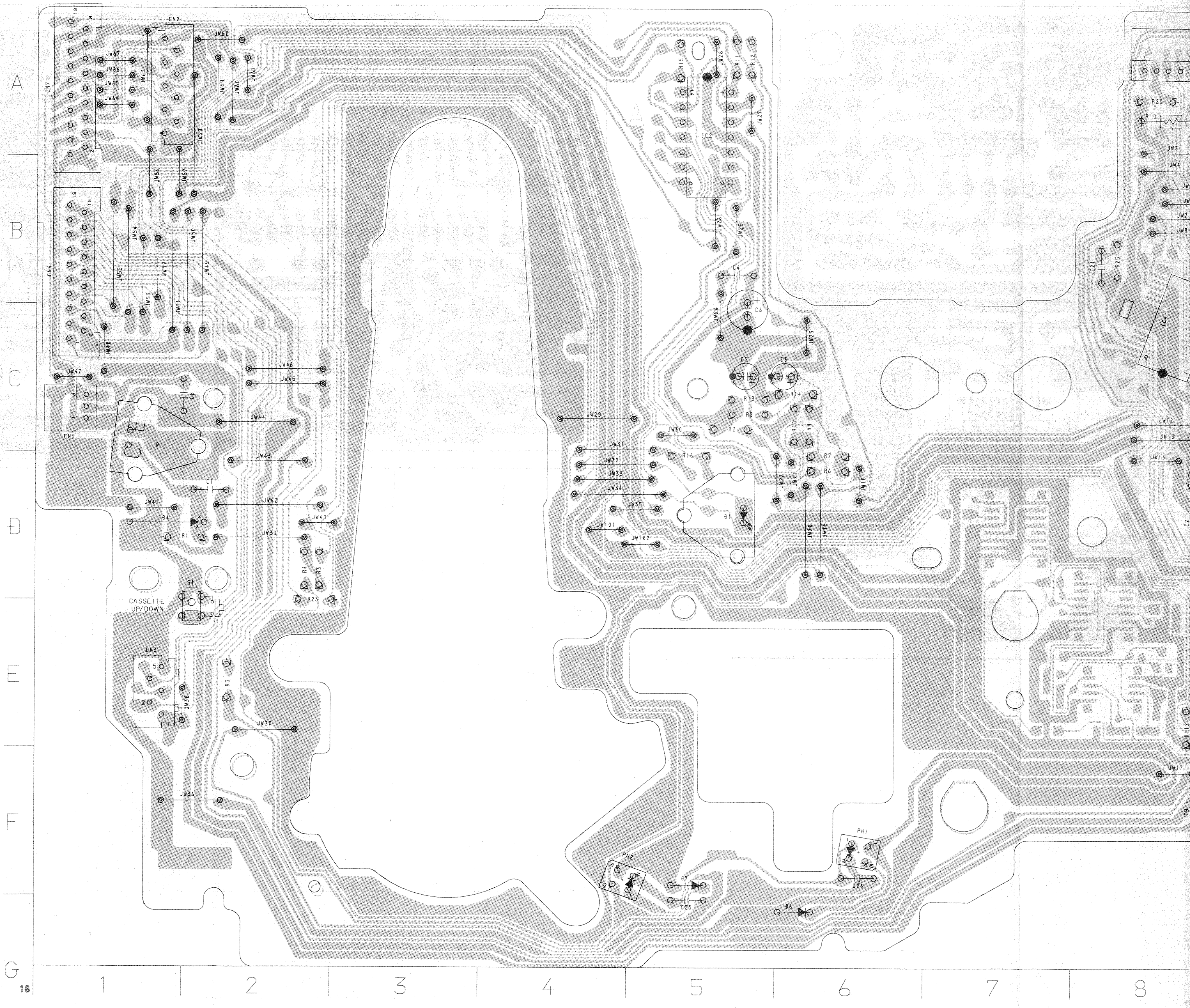
CN401	A-5
CN402	B-3
D401	A-3
D402	B-4
D403	B-5
D450	A-3
IC401	A-2
IC402	A-4
Q402	B-3
Q403	B-1
Q404	B-1
Q405	B-1
Q406	A-5
Q407	B-5
Q408	B-4
Q409	B-4
Q470	A-5
RV451	A-4

MD-55(MECHANISM DRIVE), CA-41(CAM MOTOR) PRINTED WIRING BOARDS

—Ref.No. MD-55 BOARD: 2,000 series, CA-41 BOARD: 1,000 series—

MD-55 BOARD

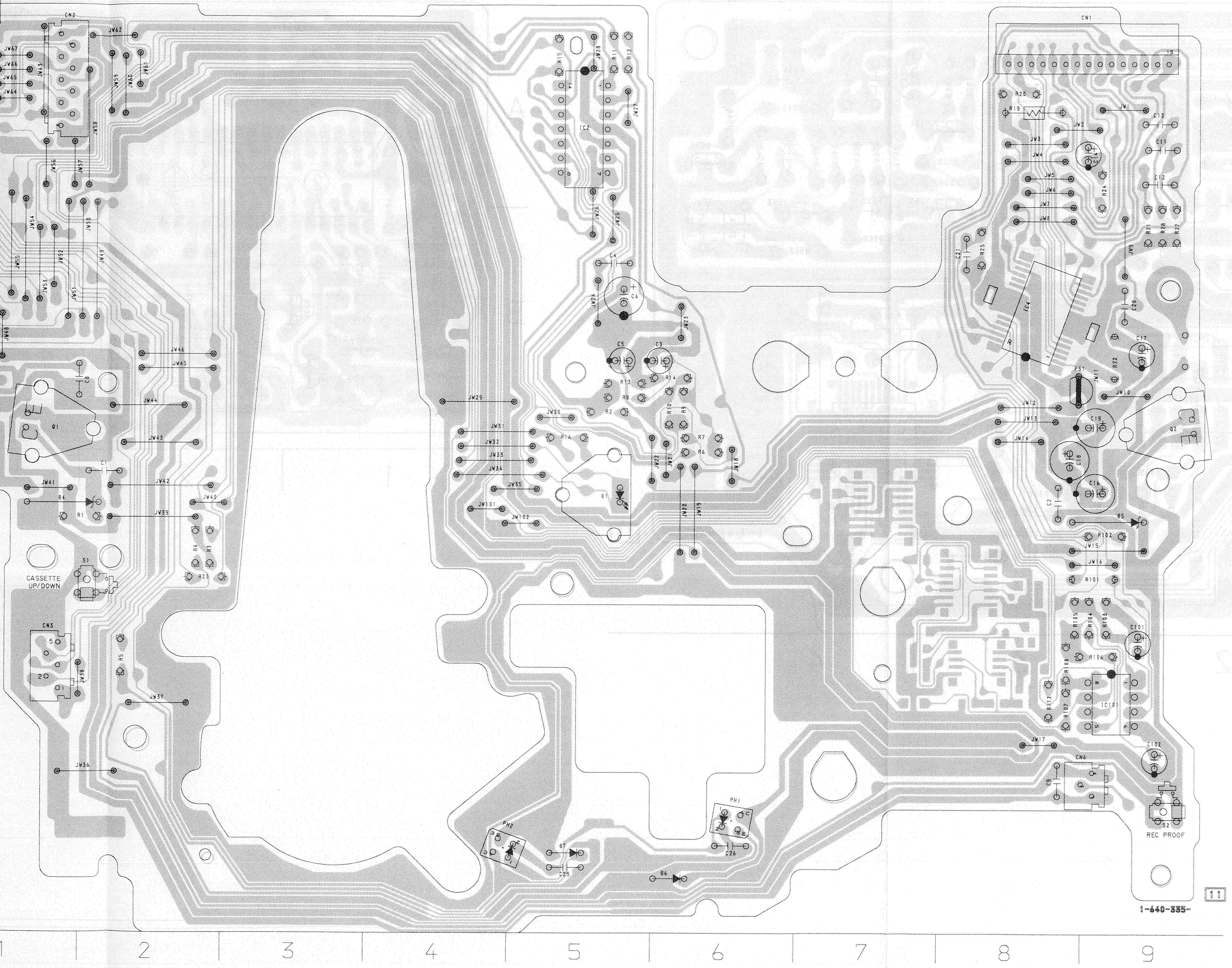
MD-55 BOARD	
CN001	A-8
CN002	A-2
CN003	E-1
CN004	B-1
CN005	C-1
CN006	F-9
CN007	A-1
D001	D-5
D004	D-2
D005	D-9
D006	G-6
D007	F-5
IC002	A-5
IC004	C-8
IC101	E-9
Q001	C-2
Q002	C-9


A
B
C
D
E
F
G
18
1
2
3
4
5
6
7
8
CN7
CN2
CN4
CN5
CN3
JW62
JW67
JW66
JW65
JW64
JW63
JW59
JW60
JW61
JW58
JW56
JW57
JW54
JW50
JW52
JW49
JW55
JW53
JW51
JW48
JW47
JW46
JW45
JW44
JW43
JW42
JW41
JW40
JW39
JW38
JW37
JW36
JW29
JW30
JW31
JW32
JW33
JW34
JW35
JW101
JW102
JW28
JW27
JW26
JW25
JW24
JW23
JW22
JW21
JW20
JW19
JW18
IC2
IC4
Q1
S1
CASSETTE UP/DOWN
C1
C3
C4
C5
C6
C8
C21
C25
C26
D4
D6
D7
R1
R2
R3
R4
R5
R6
R7
R8
R9
R10
R11
R12
R13
R14
R15
R16
R19
R20
R23
R25
PH1
PH2

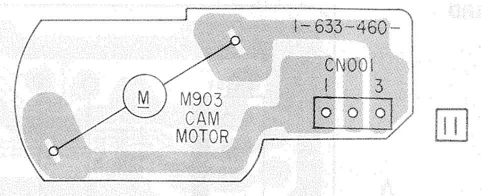
ECHANISM DRIVE), CA-41(CAM MOTOR) PRINTED WIRING BOARDS

-55 BOARD: 2,000 series, CA-41 BOARD:1,000 series—

55 BOARD

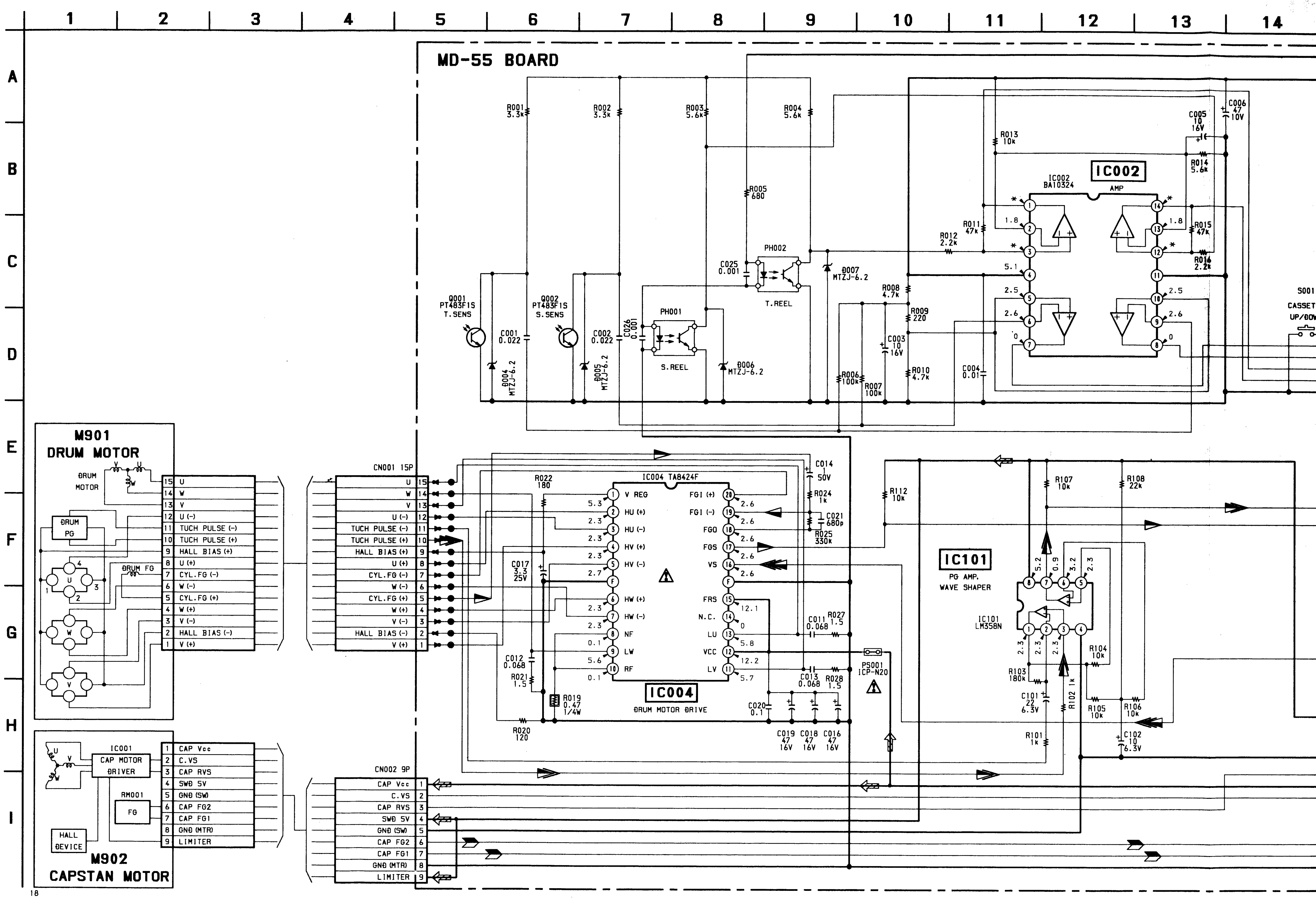

CN1
CN2
IC2
IC4
IC101
Q1
Q2
S1
CASSETTE UP/DOWN
CN3
CN6
PH1
PH2
PS1
S2
REC PROOF
11
1-640-335-
1
2
3
4
5
6
7
8
9

CA-41 BOARD


1-633-460-
CN001
1
3
M
M903
CAM
MOTOR
11

MD-55(MECHANISM DRIVE), CA-41(CAM MOTOR) SCHEMATIC DIAGRAM

—Ref.No. MD-55 BOARD: 2,000 series, CA-41 BOARD: 1,000 series—

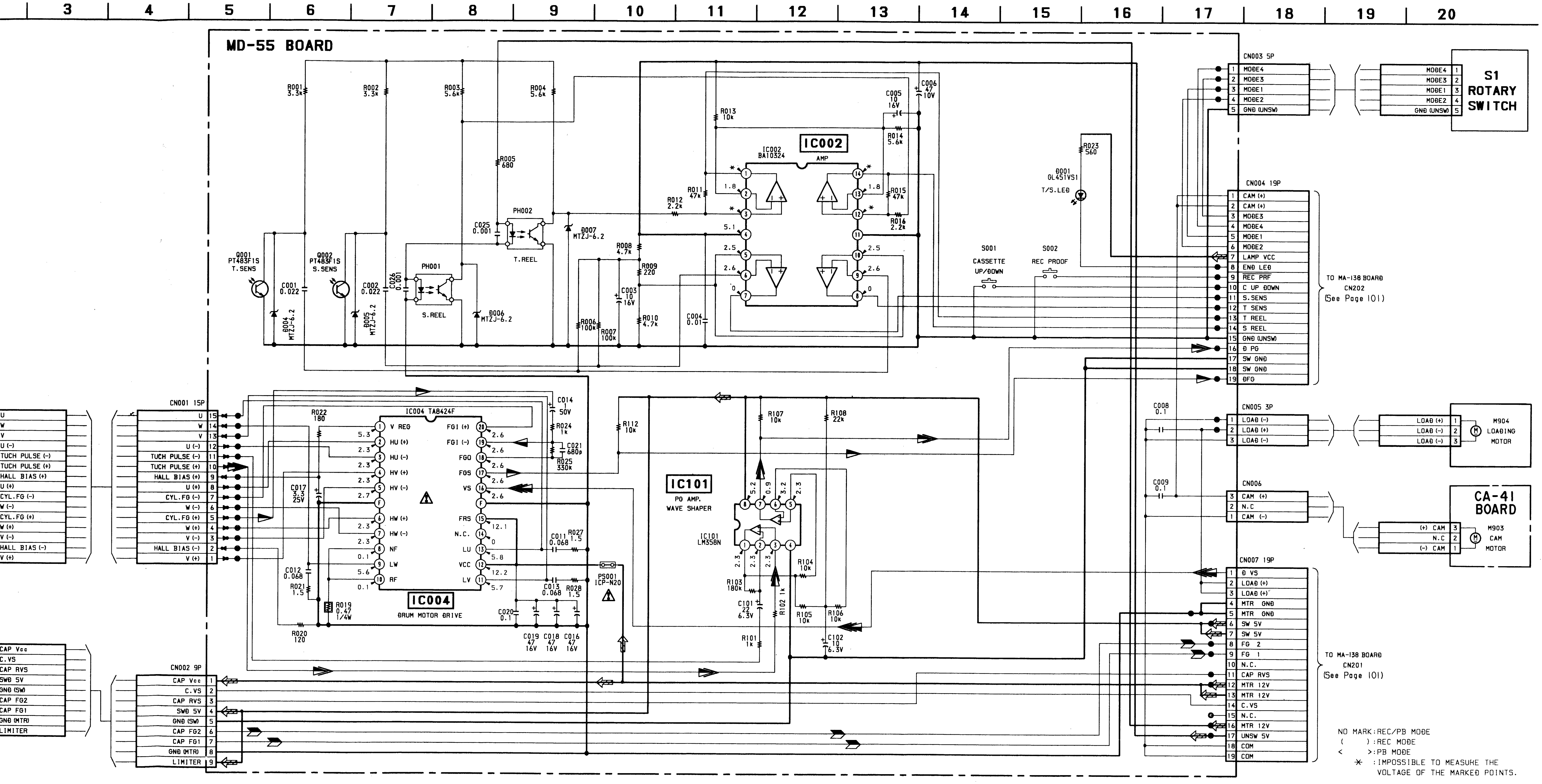

1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
MD-55 BOARD
R001 3.3k
R002 3.3k
R003 5.6k
R004 5.6k
R005 680
PH002
T.REEL
PH001
S.REEL
Q001 PT483F1S T.SENS
Q002 PT483F1S S.SENS
C001 0.022
C002 0.022
C025 0.001
C026 0.001
D004 MTZJ-6.2
D005 MTZJ-6.2
D006 MTZJ-6.2
D007 MTZJ-6.2
R006 100k
R007 100k
R008 4.7k
R009 220
R010 4.7k
C003 10 16V
C004 0.01
R011 47k
R012 2.2k
R013 10k
R014 5.6k
R015 47k
R016 2.2k
C005 10 16V
C006 47 10V
IC002 BA10324
IC002
AMP
S001
CASSETTE UP/DOWN
M901
DRUM MOTOR
DRUM MOTOR
DRUM PG
DRUM FG
U
W
V
U (-)
TUCH PULSE (-)
TUCH PULSE (+)
HALL BIAS (+)
U (+)
CYL.FG (-)
W (-)
CYL.FG (+)
W (+)
V (-)
HALL BIAS (-)
V (+)
CN001 15P
CN002 9P
IC004 TA8424F
V REG
HU (+)
HU (-)
HV (+)
HV (-)
HW (+)
HW (-)
NF
LW
RF
FG1 (+)
FG1 (-)
FGO
FGS
VS
FRS
N.C.
LU
VCC
LV
IC004
DRUM MOTOR DRIVE
R022 180
R019 0.47 1/4W
R020 120
R021 1.5
C012 0.068
C017 3.3 25V
C014 1 50V
R024 1k
C021 680p
R025 330k
C011 0.068
R027 1.5
C013 0.068
R028 1.5
C020 0.1
C019 47 16V
C018 47 16V
C016 47 16V
PS001 ICP-N20
R112 10k
IC101
PG AMP. WAVE SHAPER
IC101 LM358N
R107 10k
R108 22k
R103 180k
R104 10k
R102 1k
R105 10k
R106 10k
C101 22 6.3V
C102 10 6.3V
R101 1k
IC001
CAP MOTOR DRIVER
RM001
FG
HALL DEVICE
M902
CAPSTAN MOTOR
CAP Vcc
C.VS
CAP RVS
SWD 5V
GND (SW)
CAP FG2
CAP FG1
GND (MTR)
LIMITER
18

·SIGNAL PATH

	REC	REC/PB	PB
Drum speed servo		▷	
Drum pilase serbo		⊳	
Drum servo (speed and phase)		⋙	
Capstan speed servo		➢	
Capstan phase servo			
Capstan servo (speed and phase)			
Ref. signal			

ANISM DRIVE), CA-41(CAM MOTOR) SCHEMATIC DIAGRAM

DARD: 2,000 series, CA-41 BOARD: 1,000 series—



3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
MD-55 BOARD
R001 3.3k
R002 3.3k
R003 5.6k
R004 5.6k
R005 680
Q001 PT483F1S T.SENS
Q002 PT483F1S S.SENS
C001 0.022
C002 0.022
C026 0.001
C025 0.001
D004 MTZJ-6.2
D005 MTZJ-6.2
D006 MTZJ-6.2
D007 MTZJ-6.2
PH001 S.REEL
PH002 T.REEL
R006 100k
R007 100k
R008 4.7k
R009 220
R010 4.7k
C003 10 16V
C004 0.01
R011 47k
R012 2.2k
R013 10k
R014 5.6k
R015 47k
R016 2.2k
C005 10 16V
C006 47 10V
IC002 BA10324
IC002
AMP
R023 560
D001 GL451VS1 T/S.LED
S001 CASSETTE UP/DOWN
S002 REC PROOF
CN003 5P
MODE4
MODE3
MODE1
MODE2
GND (UNSW)
S1 ROTARY SWITCH
CN004 19P
CAM (+)
CAM (+)
MODE3
MODE4
MODE1
MODE2
LAMP VCC
END LED
REC PRF
C UP DOWN
S.SENS
T SENS
T REEL
S REEL
GND (UNSW)
D PG
SW GND
SW GND
DFG
TO MA-138 BOARD CN202 (See Page 101)
CN001 15P
U
W
V
U (-)
TUCH PULSE (-)
TUCH PULSE (+)
HALL BIAS (+)
U (+)
CYL.FG (-)
W (-)
CYL.FG (+)
W (+)
V (-)
HALL BIAS (-)
V (+)
R022 180
IC004 TA8424F
V REG
HU (+)
HU (-)
HV (+)
HV (-)
HW (+)
HW (-)
NF
LW
RF
FG1 (+)
FG1 (-)
FGO
FGS
VS
FRS
N.C.
LU
VCC
LV
IC004
DRUM MOTOR DRIVE
C014 1 50V
R024 1k
C021 680p
R025 330k
C011 0.068
R027 1.5
C013 0.068
R028 1.5
C017 3.3 25V
C012 0.068
R021 1.5
R019 0.47 1/4W
R020 120
C020 0.1
C019 47 16V
C018 47 16V
C016 47 16V
PS001 ICP-N20
R112 10k
IC101 PG AMP. WAVE SHAPER
IC101 LM358N
R107 10k
R108 22k
R103 180k
R104 10k
R102 1k
R105 10k
R106 10k
C101 22 6.3V
C102 10 6.3V
R101 1k
CN002 9P
CAP Vcc
C.VS
CAP RVS
SWD 5V
GND (SW)
CAP FG2
CAP FG1
GND (MTR)
LIMITER
C008 0.1
C009 0.1
CN005 3P
LOAD (-)
LOAD (+)
LOAD (-)
M904 LOADING MOTOR
CN006
CAM (+)
N.C
CAM (-)
CA-41 BOARD
M903 CAM MOTOR
CN007 19P
D VS
LOAD (+)
LOAD (+)
MTR GND
MTR GND
SW 5V
SW 5V
FG 2
FG 1
N.C.
CAP RVS
MTR 12V
MTR 12V
C.VS
N.C.
MTR 12V
UNSW 5V
COM
COM
TO MA-138 BOARD CN201 (See Page 101)

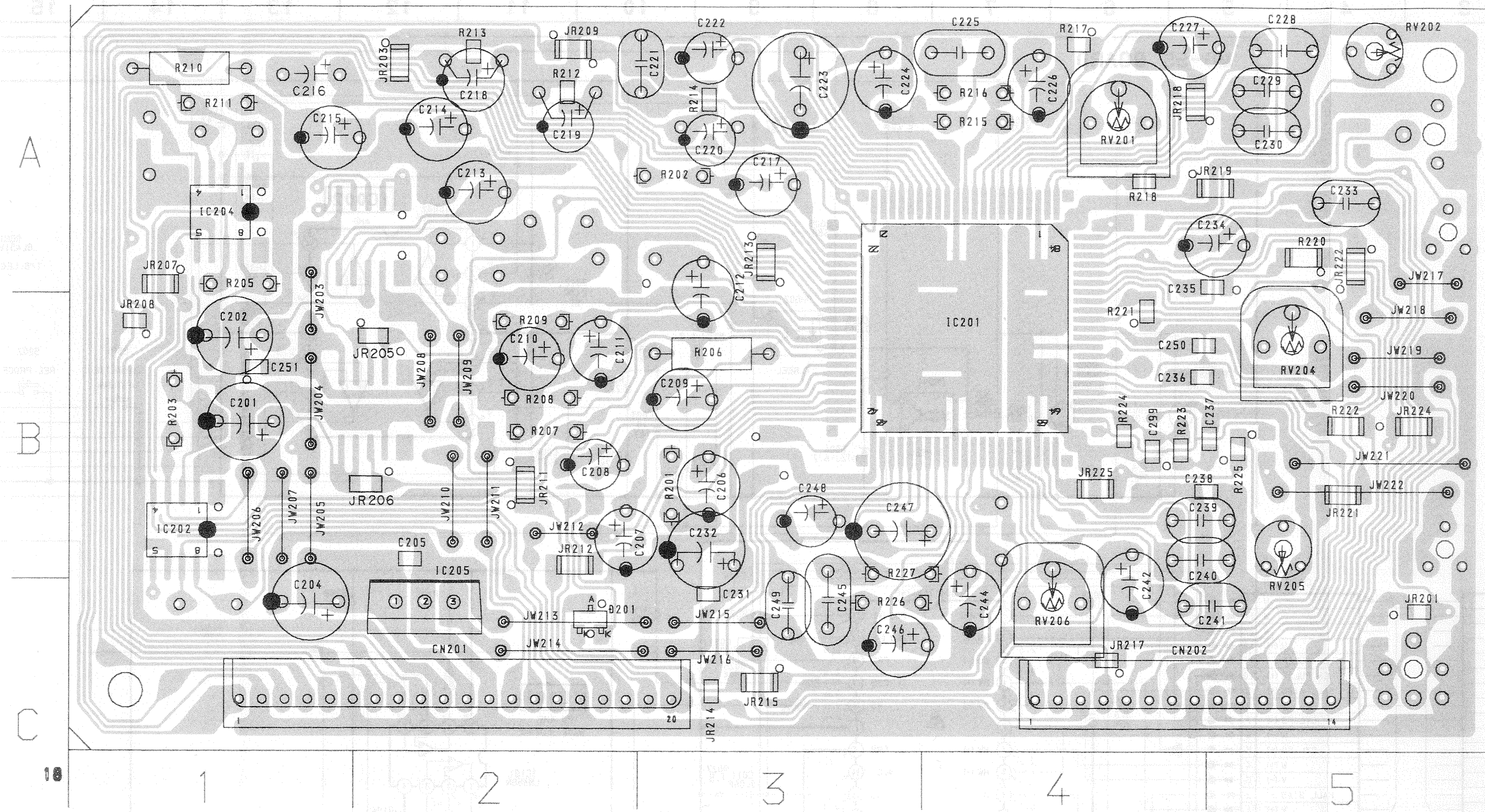
NO MARK:REC/PB MODE
( ) :REC MODE
< >:PB MODE
✱ :IMPOSSIBLE TO MEASUHE THE VOLTAGE OF THE MARKED POINTS.

HF-22(Hi-Fi AUDIO) PRINTED WIRING BOARD

—Ref.No. HF-22 BOARD: 2,000 series—

HF-22 BOARD	
CN201	C-2
CN202	C-4
D201	C-2
IC201	B-4
IC202	B-1
IC203	B-2
IC204	A-1
IC205	C-2
RV201	A-4
RV202	A-5
RV204	B-5
RV205	B-5
RV206	C-4

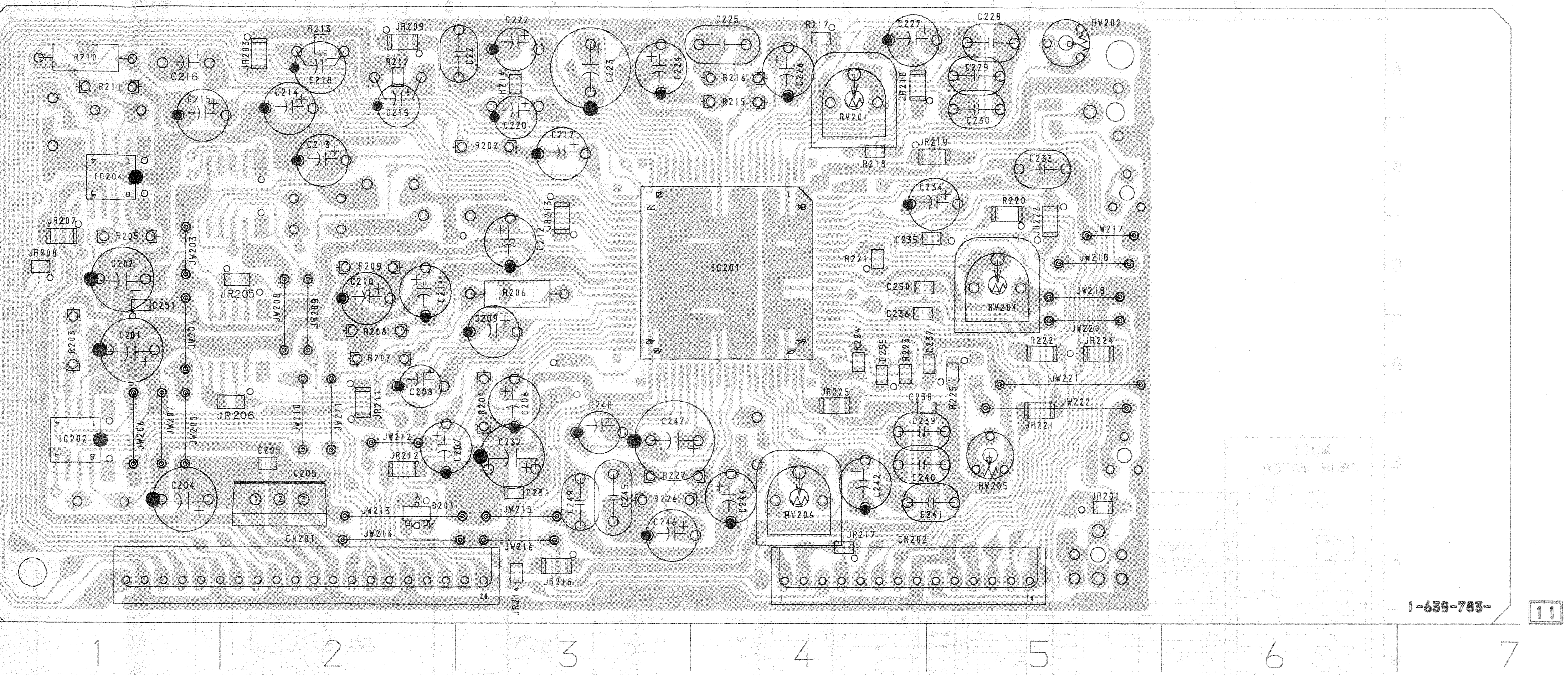
HF-22 BOARD


A
B
C
1
2
3
4
5
IC201
IC202
IC204
IC205
CN201
CN202
D201
RV201
RV202
RV204
RV205
RV206
C201
C202
C204
C205
C206
C207
C208
C209
C210
C211
C212
C213
C214
C215
C216
C217
C218
C219
C220
C221
C222
C223
C224
C225
C226
C227
C228
C229
C230
C231
C232
C233
C234
C235
C236
C237
C238
C239
C240
C241
C242
C244
C245
C246
C247
C248
C249
C250
C251
R201
R202
R203
R205
R206
R207
R208
R209
R210
R211
R212
R213
R214
R215
R216
R217
R218
R220
R221
R222
R223
R224
R225
R226
R227
JR201
JR205
JR206
JR207
JR208
JR209
JR212
JR213
JR214
JR215
JR217
JR218
JR219
JR221
JR222
JR224
JR225
JW203
JW204
JW205
JW206
JW207
JW208
JW209
JW210
JW211
JW212
JW213
JW214
JW215
JW216
JW217
JW218
JW219
JW220
JW221
JW222
18
20
14

22(Hi-Fi AUDIO) PRINTED WIRING BOARD

No. HF-22 BOARD; 2,000 series—

HF-22 BOARD


R210
R211
C216
JR203
R213
C218
JR209
R212
C219
C214
C215
C213
IC204
C222
C221
R214
C220
C223
C224
C225
R216
R215
C226
R217
C227
RV201
JR218
C228
C229
C230
RV202
C217
R202
JR213
C212
IC201
JR219
R218
C233
C234
R220
JR222
C235
JW217
JW218
R221
RV204
C250
JW219
C236
JW220
R222
JR224
R224
C299
R223
C237
JW221
R225
JR225
C238
JW222
JR221
C239
C240
RV205
C241
JR201
RV206
C242
C244
C246
R226
R227
C245
C249
C247
C248
JR207
JR208
R205
C202
C251
JR205
JW203
JW204
JW208
JW209
R209
C210
C211
R206
R208
C209
R207
C208
R201
C206
R203
C201
IC202
JW206
JW207
JW205
JR206
JW210
JW211
JR211
JW212
JR212
C207
C232
C205
IC205
C204
JW213
D201
JW215
C231
JW214
CN201
JW216
JR214
JR215
JR217
CN202
1-639-783-
11
1
2
3
4
5
6
7

< DIODE >

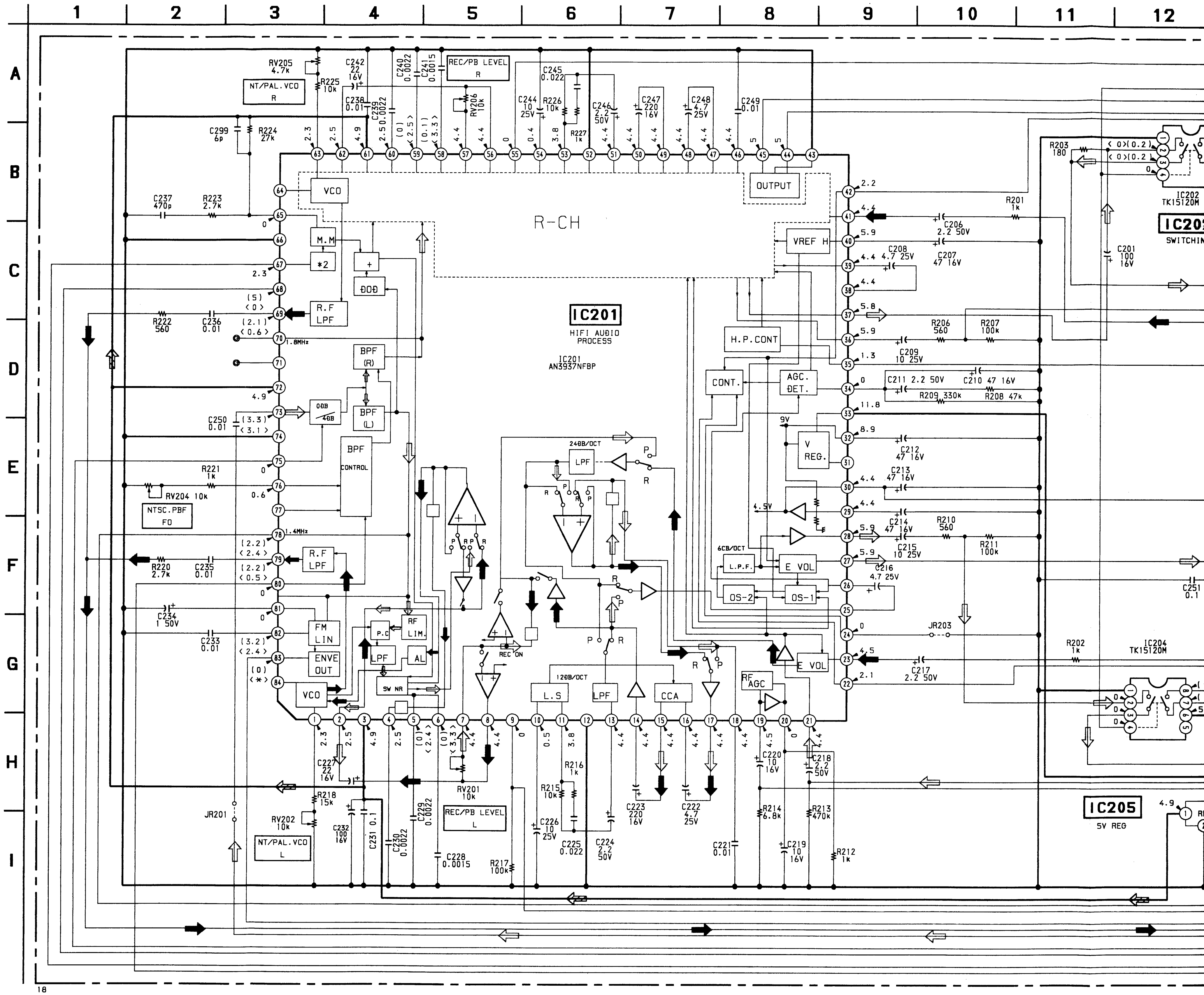
D201	8-719-104-34	DIODE	1S2836

< IC >

IC201	8-759-057-63	IC	AN3937NFBP
IC202	8-759-946-44	IC	TK15120M
IC203	8-759-924-46	IC	BA4560F
IC204	8-759-946-44	IC	TK15120M
IC205	8-759-938-15	IC	BA178M05

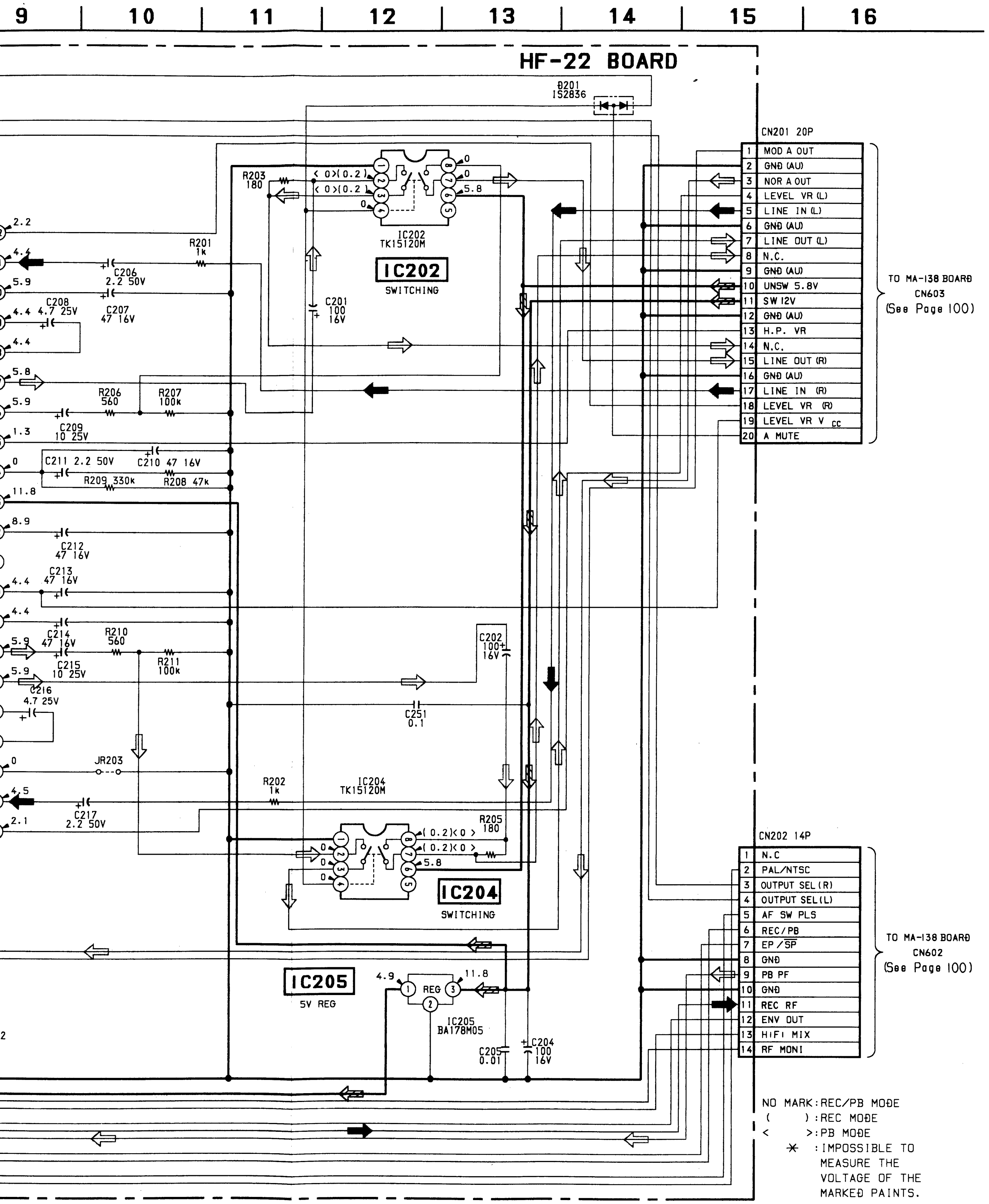
HF-22(Hi-Fi AUDIO) SCHEMATIC DIAGRAM

–Ref.No. HF-22 BOARD: 2,000 series–


1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G
H
I
IC201
HIFI AUDIO PROCESS
IC201 AN3937NFBP
R-CH
VCO
M.M
*2
R.F LPF
BPF (R)
BPF (L)
BPF CONTROL
0dB/-6dB
DOD
OUTPUT
VREF H
H.P.CONT
CONT.
AGC. DET.
V REG.
E VOL
OS-1
OS-2
L.P.F.
FM LIN
ENVE OUT
P.C
RF LIM.
LPF
AL
SW NR
L.S
CCA
RF AGC
24dB/OCT
12dB/OCT
6dB/OCT
REC/PB LEVEL R
REC/PB LEVEL L
NT/PAL.VCO R
NT/PAL.VCO L
NTSC.PBF FO
RV205 4.7k
RV206 10k
RV204 10k
RV202 10k
RV201 10k
JR201
JR203
IC202 TK15120M
SWITCHING
IC204 TK15120M
IC205
5V REG
R203 180
R201 1k
R202 1k
1.8MHz
1.4MHz
REC ON
9V
4.5V

·SIGNAL PATH

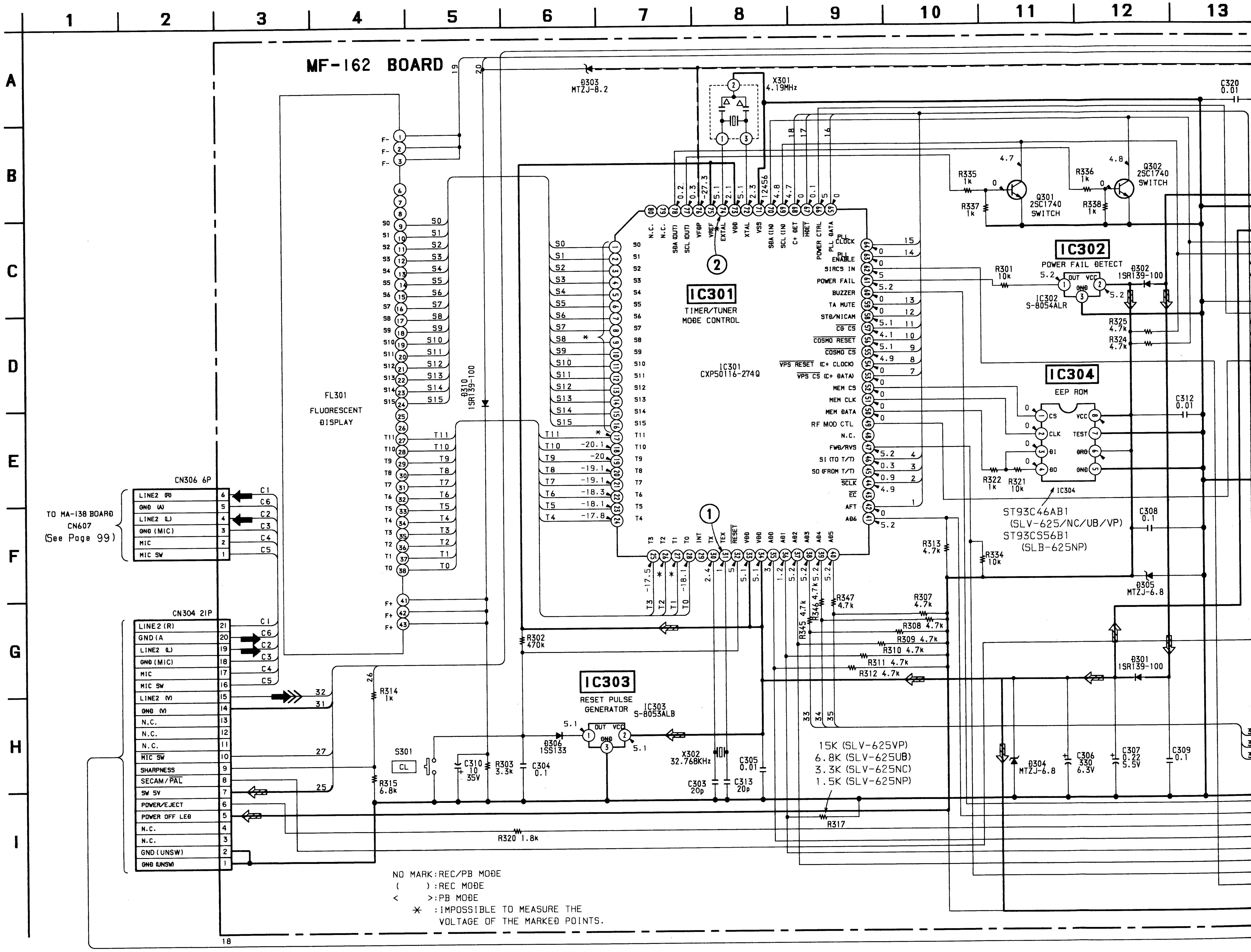
	VIDEO Signal			AUDIO Signal
	CHROMA	Y	Y/CHROMA	
REC				➡
PB				⇨


9
10
11
12
13
14
15
16
HF-22 BOARD
D201 1S2836
CN201 20P
1 MOD A OUT
2 GND (AU)
3 NOR A OUT
4 LEVEL VR (L)
5 LINE IN (L)
6 GND (AU)
7 LINE OUT (L)
8 N.C.
9 GND (AU)
10 UNSW 5.8V
11 SW 12V
12 GND (AU)
13 H.P. VR
14 N.C.
15 LINE OUT (R)
16 GND (AU)
17 LINE IN (R)
18 LEVEL VR (R)
19 LEVEL VR Vcc
20 A MUTE
TO MA-138 BOARD CN603 (See Page 100)
R203 180
IC202 TK15120M
IC202
SWITCHING
R201 1k
C206 2.2 50V
C207 47 16V
C208 4.7 25V
C201 100 16V
R206 560
R207 100k
C209 10 25V
C211 2.2 50V
C210 47 16V
R209 330k
R208 47k
C212 47 16V
C213 47 16V
C214 47 16V
R210 560
R211 100k
C215 10 25V
C216 4.7 25V
C202 100 16V
C251 0.1
JR203
R202 1k
IC204 TK15120M
R205 180
C217 2.2 50V
IC204
SWITCHING
IC205
5V REG
REG
IC205 BA178M05
C205 0.01
C204 100 16V
CN202 14P
1 N.C
2 PAL/NTSC
3 OUTPUT SEL (R)
4 OUTPUT SEL (L)
5 AF SW PLS
6 REC/PB
7 EP/SP
8 GND
9 PB FF
10 GND
11 REC RF
12 ENV OUT
13 HIFI MIX
14 RF MONI
TO MA-138 BOARD CN602 (See Page 100)
2.2
4.4
5.9
4.4
4.4
5.8
5.9
1.3
0
11.8
8.9
4.4
4.4
5.9
5.9
0
4.5
2.1
< 0 >(0.2)
< 0 >(0.2)
0
0
0
5.8
(0.2)< 0 >
(0.2)< 0 >
5.8
4.9
11.8

NO MARK:REC/PB MODE
(　　):REC MODE
<　　>:PB MODE
✳ :IMPOSSIBLE TO MEASURE THE VOLTAGE OF THE MARKED PAINTS.

MF-162(MODE CONTROL), MF-163(INPUT), MF-164(REMOTE CONTROL RECIEVER, BUZZER) SCHEMATIC DIAGRAMS

—Ref. No. MF-162, MF-163, MF-164 BOARDS: 4,000 series—

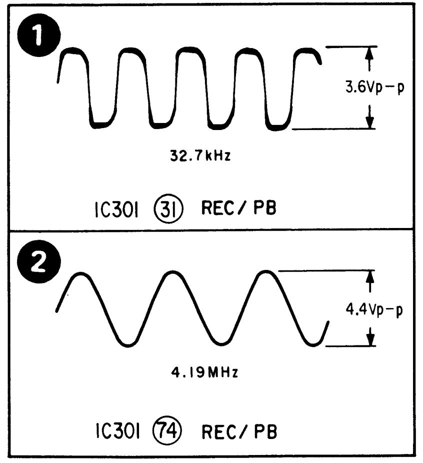

1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
H
I
MF-162 BOARD
FL301
FLUORESCENT
DISPLAY
IC301
TIMER/TUNER
MODE CONTROL
IC301
CXP50116-274Q
IC302
POWER FAIL DETECT
IC302
S-8054ALR
IC303
RESET PULSE
GENERATOR
IC303
S-8053ALB
IC304
EEP ROM
ST93C46AB1
(SLV-625/NC/UB/VP)
ST93C556B1
(SLB-625NP)
X301
4.19MHz
X302
32.768KHz
Q301
2SC1740
SWITCH
Q302
2SC1740
SWITCH
D303
MTZJ-8.2
D305
MTZJ-6.8
D301
1SR139-100
D302
1SR139-100
D304
MTZJ-6.8
D306
1SS133
D310
1SR139-100
S301
CL
CN306 6P
LINE2 (R)
GND (A)
LINE2 (L)
GND (MIC)
MIC
MIC SW
TO MA-138 BOARD
CN607
(See Page 99)
CN304 21P
LINE2 (R)
GND (A)
LINE2 (L)
GND (MIC)
MIC
MIC SW
LINE2 (V)
GND (V)
N.C.
N.C.
N.C.
MIC SW
SHARPNESS
SECAM/PAL
SW 5V
POWER/EJECT
POWER OFF LED
N.C.
N.C.
GND (UNSW)
GND (UNSW)
15K (SLV-625VP)
6.8K (SLV-625UB)
3.3K (SLV-625NC)
1.5K (SLV-625NP)
R317
R320 1.8k
R302 470k
R314 1k
R315 6.8k
R303 3.3k
C310 10 35V
C304 0.1
C303 20p
C313 20p
C305 0.01
C306 330 6.3V
C307 0.22 5.5V
C309 0.1
C308 0.1
C312 0.01
C320 0.01
R301 10k
R322 1k
R321 10k
R334 10k
R313 4.7k
R307 4.7k
R308 4.7k
R309 4.7k
R310 4.7k
R311 4.7k
R312 4.7k
R347 4.7k
R345 4.7k
R346 4.7k
R324 4.7k
R325 4.7k
R335 1k
R336 1k
R337 1k
R338 1k

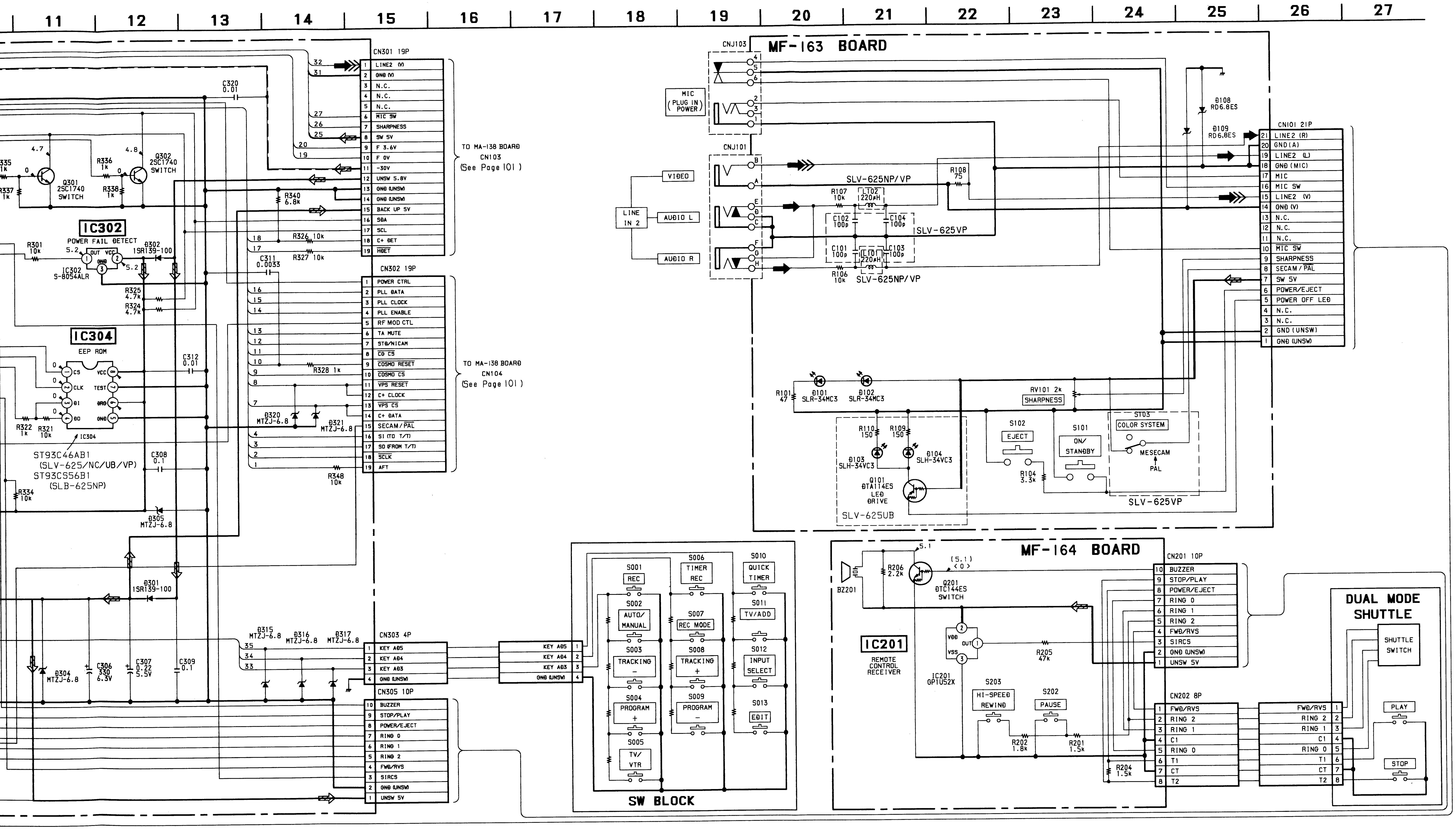
NO MARK: REC/PB MODE
(   ): REC MODE
<   >: PB MODE
✳: IMPOSSIBLE TO MEASURE THE VOLTAGE OF THE MARKED POINTS.

·SIGNAL PATH

	VIDEO Signal			AUDIO Signal
	CHROMA	Y	Y/CHROMA	
REC			⇛	➡
PB				⇨

MF-162 BOARD


1
3.6Vp-p
32.7kHz
IC301 ㉛ REC/PB
2
4.4Vp-p
4.19MHz
IC301 (74) REC/PB


11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
CN301 19P
LINE2 (V)
GND (V)
N.C.
N.C.
N.C.
MIC SW
SHARPNESS
SW 5V
F 3.6V
F 0V
-30V
UNSW 5.8V
GND (UNSW)
GND (UNSW)
BACK UP 5V
SDA
SCL
C+ DET
HDET
TO MA-138 BOARD CN103 (See Page 101)
CN302 19P
POWER CTRL
PLL DATA
PLL CLOCK
PLL ENABLE
RF MOD CTL
TA MUTE
STD/NICAM
CD CS
COSMO RESET
COSMO CS
VPS RESET
C+ CLOCK
VPS CS
C+ DATA
SECAM/PAL
SI (TO T/T)
SO (FROM T/T)
SCLK
AFT
TO MA-138 BOARD CN104 (See Page 101)
IC302
POWER FAIL DETECT
IC302 S-8054ALR
D302 1SR139-100
IC304
EEP ROM
ST93C46AB1 (SLV-625/NC/UB/VP)
ST93CS56B1 (SLB-625NP)
Q301 2SC1740 SWITCH
Q302 2SC1740 SWITCH
D305 MTZJ-6.8
D301 1SR139-100
D304 MTZJ-6.8
D320 MTZJ-6.8
D321 MTZJ-6.8
D315 MTZJ-6.8
D316 MTZJ-6.8
D317 MTZJ-6.8
C320 0.01
C311 0.0033
C312 0.01
C308 0.1
C306 330 6.3V
C307 0.22 5.5V
C309 0.1
R340 6.8k
R326 10k
R327 10k
R328 1k
R348 10k
R325 4.7k
R324 4.7k
R301 10k
R336 1k
R338 1k
R322 1k
R321 10k
R334 10k
CN303 4P
KEY A05
KEY A04
KEY A03
GND (UNSW)
CN305 10P
BUZZER
STOP/PLAY
POWER/EJECT
RING 0
RING 1
RING 2
FWD/RVS
SIRCS
GND (UNSW)
UNSW 5V
SW BLOCK
S001 REC
S002 AUTO/MANUAL
S003 TRACKING −
S004 PROGRAM +
S005 TV/VTR
S006 TIMER REC
S007 REC MODE
S008 TRACKING +
S009 PROGRAM −
S010 QUICK TIMER
S011 TV/ADD
S012 INPUT SELECT
S013 EDIT
MF-163 BOARD
CNJ103
MIC (PLUG IN POWER)
CNJ101
VIDEO
LINE IN 2
AUDIO L
AUDIO R
SLV-625NP/VP
SLV-625VP
R107 10k
LT02 220µH
LT01 220µH
C102 100p
C104 100p
C101 100p
C103 100p
R106 10k
R108 75
D108 RD6.8ES
D109 RD6.8ES
CN101 21P
LINE2 (R)
GND (A)
LINE2 (L)
GND (MIC)
MIC
MIC SW
LINE2 (V)
GND (V)
N.C.
N.C.
N.C.
MIC SW
SHARPNESS
SECAM/PAL
SW 5V
POWER/EJECT
POWER OFF LED
N.C.
N.C.
GND (UNSW)
GND (UNSW)
R101 47
D101 SLR-34MC3
D102 SLR-34MC3
RV101 2k SHARPNESS
R110 150
R109 150
D103 SLH-34VC3
D104 SLH-34VC3
Q101 DTA114ES LED DRIVE
SLV-625UB
S102 EJECT
S101 ON/STANDBY
S103 COLOR SYSTEM
MESECAM
PAL
R104 3.3k
SLV-625VP
MF-164 BOARD
BZ201
R206 2.2k
Q201 DTC144ES SWITCH
(5.1) <0>
IC201 REMOTE CONTROL RECEIVER
IC201 GP1U52X
R205 47k
S203 HI-SPEED REWIND
S202 PAUSE
R202 1.8k
R201 1.5k
R204 1.5k
CN201 10P
BUZZER
STOP/PLAY
POWER/EJECT
RING 0
RING 1
RING 2
FWD/RVS
SIRCS
GND (UNSW)
UNSW 5V
CN202 8P
FWD/RVS
RING 2
RING 1
C1
RING 0
T1
CT
T2
DUAL MODE SHUTTLE
SHUTTLE SWITCH
PLAY
STOP

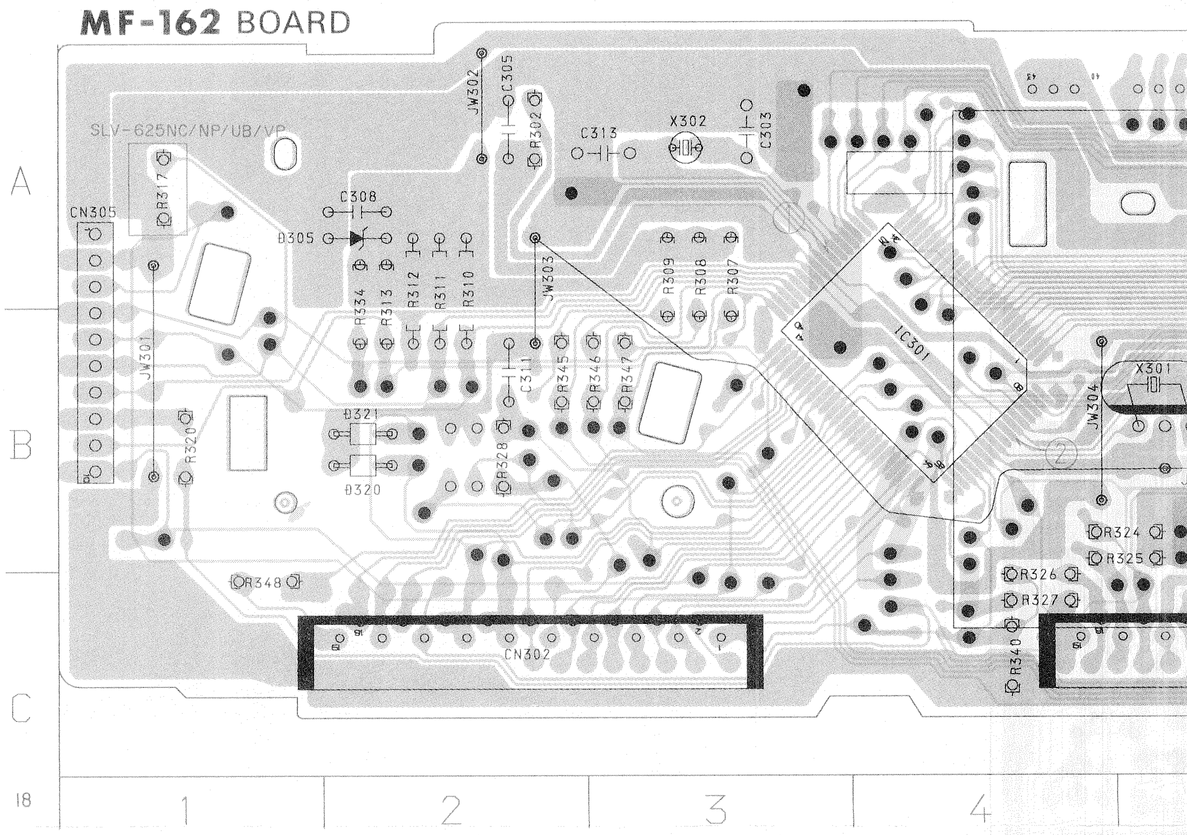
MODE CONTROL MODE CONTROL

MF-162(MODE CONTROL), MF-163(INPUT), MF-164(REMOTE CONTROL RECIEVER, BUZZER) PRINTED WIRING BOARDS

—Ref. No. MF-162, MF-163, MF-164 BOARDS : 4,000 series—

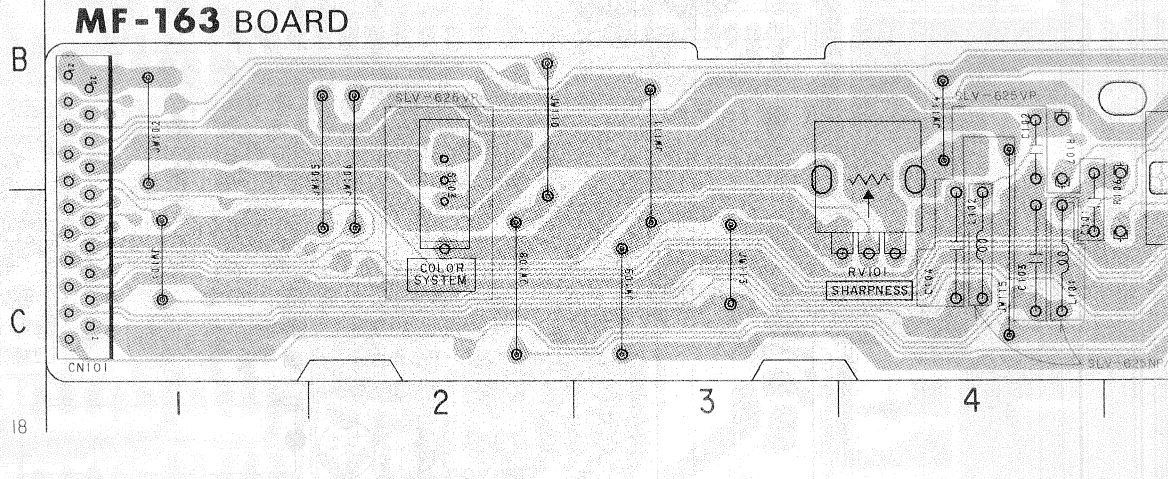
MF-162 BOARD

CN301	C-5
CN302	C-2
CN303	C-9
CN304	C-9
CN305	B-1
CN306	C-7
D301	B-6
D302	B-6
D303	B-6
D304	B-6
D305	A-2
D306	B-7
D310	B-6
D315	C-9
D316	C-9
D317	C-9
D320	B-2
D321	B-2
IC301	B-4
IC302	B-7
IC303	B-7
IC305	B-7
Q301	A-7
Q302	A-6


MF-162 BOARD
SLV-625NC/NP/UB/VP
A
B
C
18
1
2
3
4
CN305
R317
C308
D305
R334
R313
R312
R311
R310
JW302
C305
R302
C313
X302
C303
JW303
R309
R308
R307
JW301
C311
R345
R346
R347
IC301
X301
JW304
D321
D320
R320
R328
R348
CN302
R324
R325
R326
R327
R340

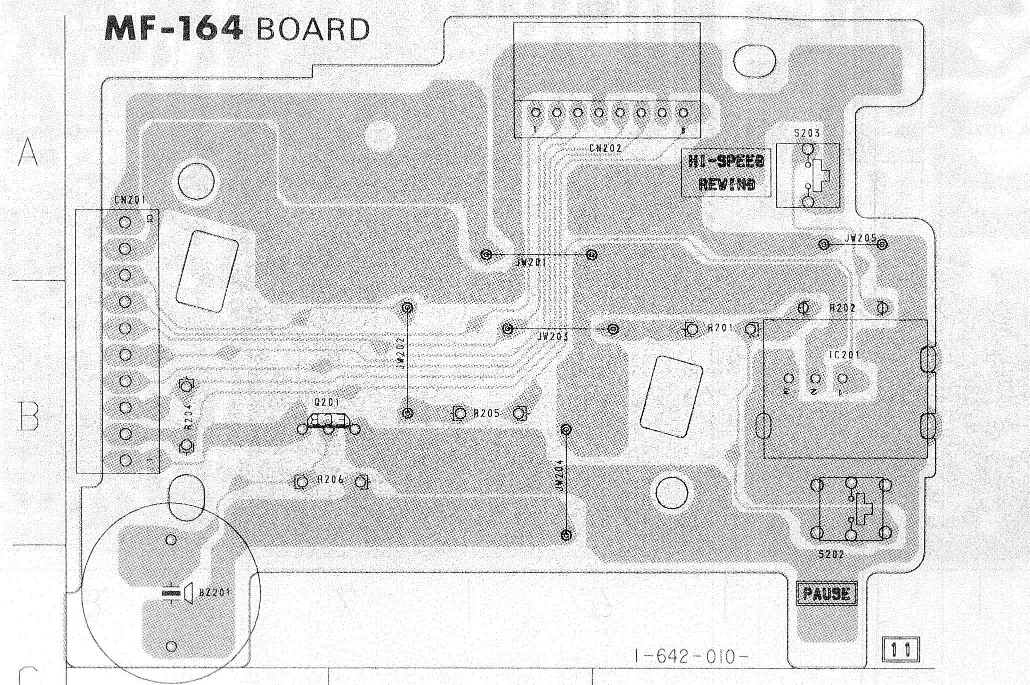
MF-163 BOARD

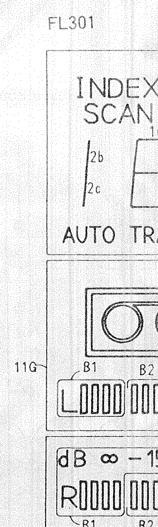
CN101	C-1
CNJ101	B-5
CNJ103	B-8
D101	A-7
D102	A-8
D103	A-8
D104	A-8
D108	C-8
D109	C-6
Q101	C-7


MF-163 BOARD
A
B
C
18
1
2
3
4
SLV-625VP
JW102
JW105
JW106
S101
COLOR SYSTEM
JW110
JW111
JW108
JW109
JW113
JW114
RV101
SHARPNESS
L102
CN101
JW101
SLV-625NP

MF-164 BOARD

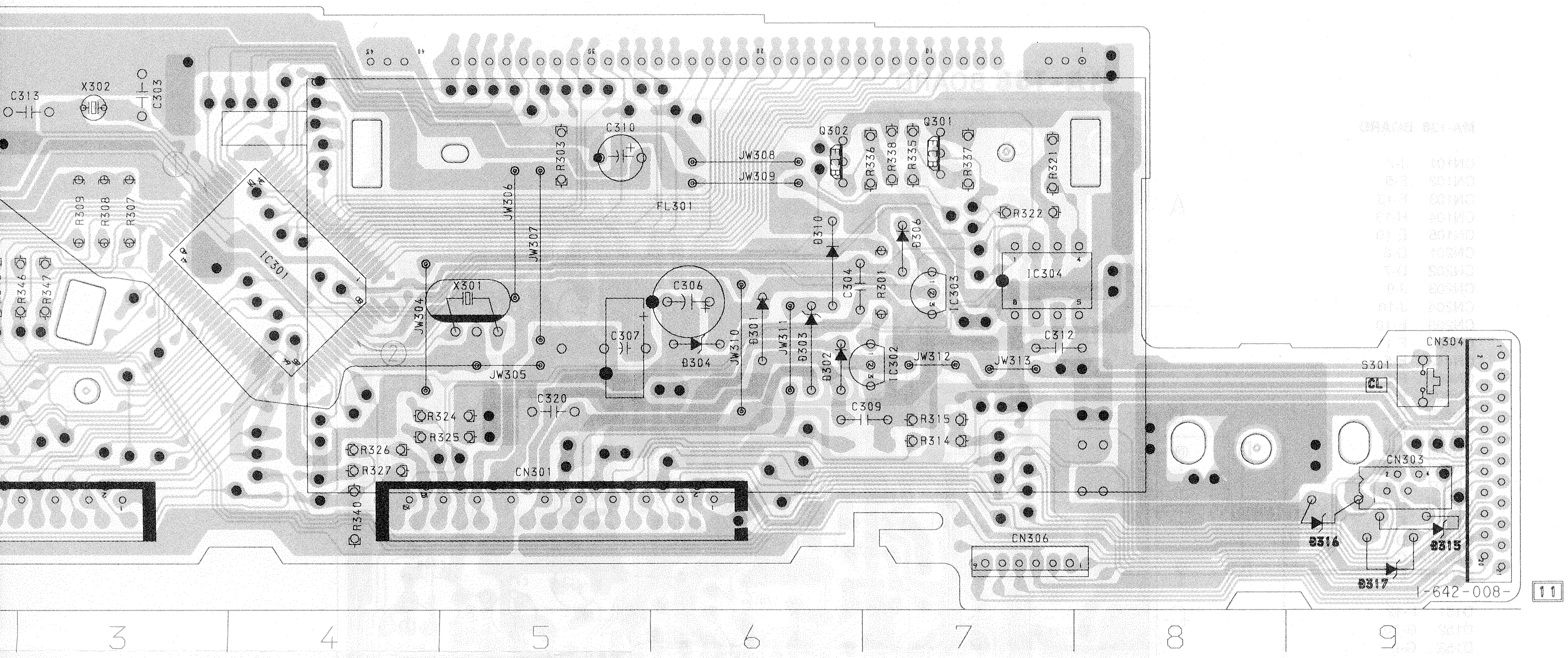
CN201	A-1
CN202	A-3
IC201	B-3
Q201	B-1

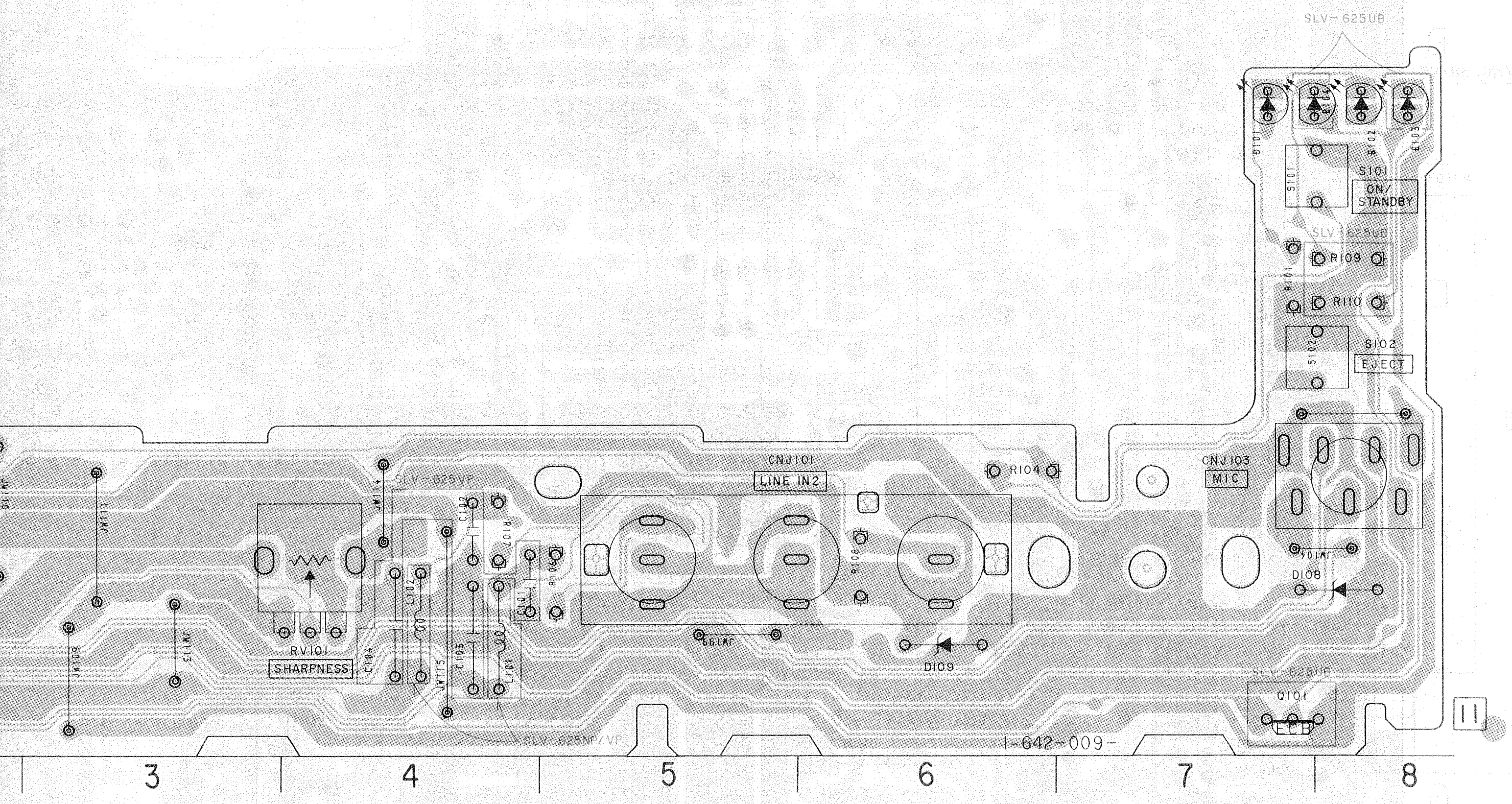

MF-164 BOARD
A
B
C
18
1
2
3
CN202
S203
HI-SPEED REWIND
CN201
JW205
JW201
R202
JW202
JW203
R201
IC201
Q201
R204
R205
JW204
R206
S202
PAUSE
BZ201
1-642-010-
11

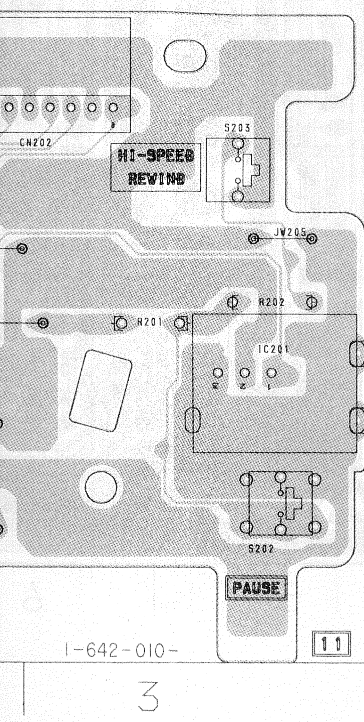

FL301
INDEX
SCAN
AUTO TR
11G
B1
B2
dB ∞ -1
R
L

PUT),
, BUZZER) PRINTED WIRING BOARDS

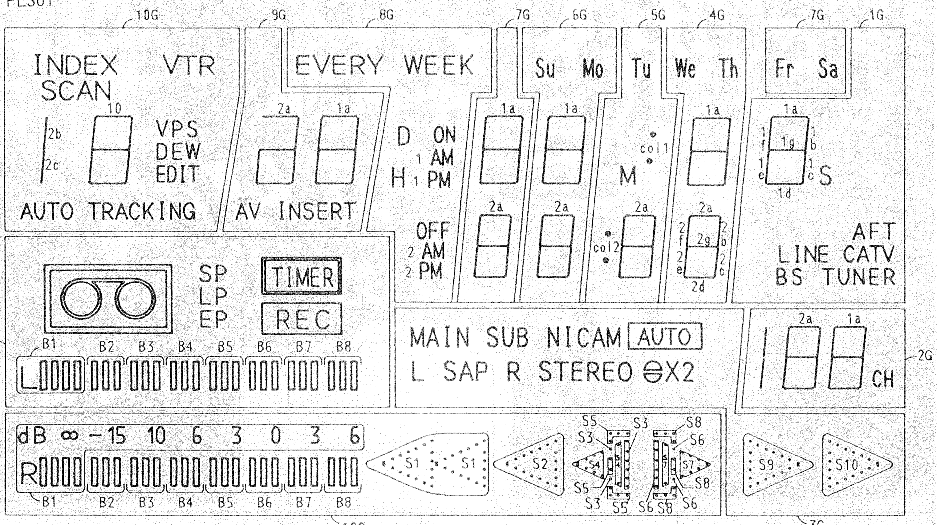
series—


C313
X302
C303
C310
Q302
Q301
R303
JW308
JW309
R336
R338
R335
R337
R321
FL301
R322
R309
R308
R307
JW306
JW307
D310
D306
R346
R347
IC301
X301
C306
R301
C304
IC303
IC304
JW304
C307
D301
JW311
JW310
D303
D302
IC302
JW312
JW313
C312
D304
JW305
C320
C309
R315
R314
S301
CL
CN304
R324
R325
R326
R327
CN301
CN303
R340
CN306
D316
D315
D317
1-642-008-
11
3
4
5
6
7
8
9


SLV-625UB
S101
ON/STANDBY
R109
R110
S102
EJECT
CNJ101
LINE IN2
R104
CNJ103
MIC
SLV-625VP
RV101
SHARPNESS
R108
D108
D109
SLV-625NP/VP
Q101
1-642-009-
11
3
4
5
6
7
8


CN202
S203
HI-SPEED REWIND
JW205
R201
R202
IC201
S202
PAUSE
1-642-010-
11
3

FL301


10G
9G
8G
7G
6G
5G
4G
7G
1G
INDEX SCAN
VTR
EVERY WEEK
Su Mo Tu We Th Fr Sa
VPS
DEW
EDIT
D ON
1 AM
H 1 PM
M
S
AUTO TRACKING
AV INSERT
OFF
2 AM
2 PM
AFT
LINE CATV
BS TUNER
SP
LP
EP
TIMER
REC
MAIN SUB NICAM AUTO
L SAP R STEREO X2
CH
11G
B1 B2 B3 B4 B5 B6 B7 B8
dB ∞ -15 10 6 3 0 3 6
R
2G
S1 S2 S3 S5 S8 S6 S9 S10
12G
3G

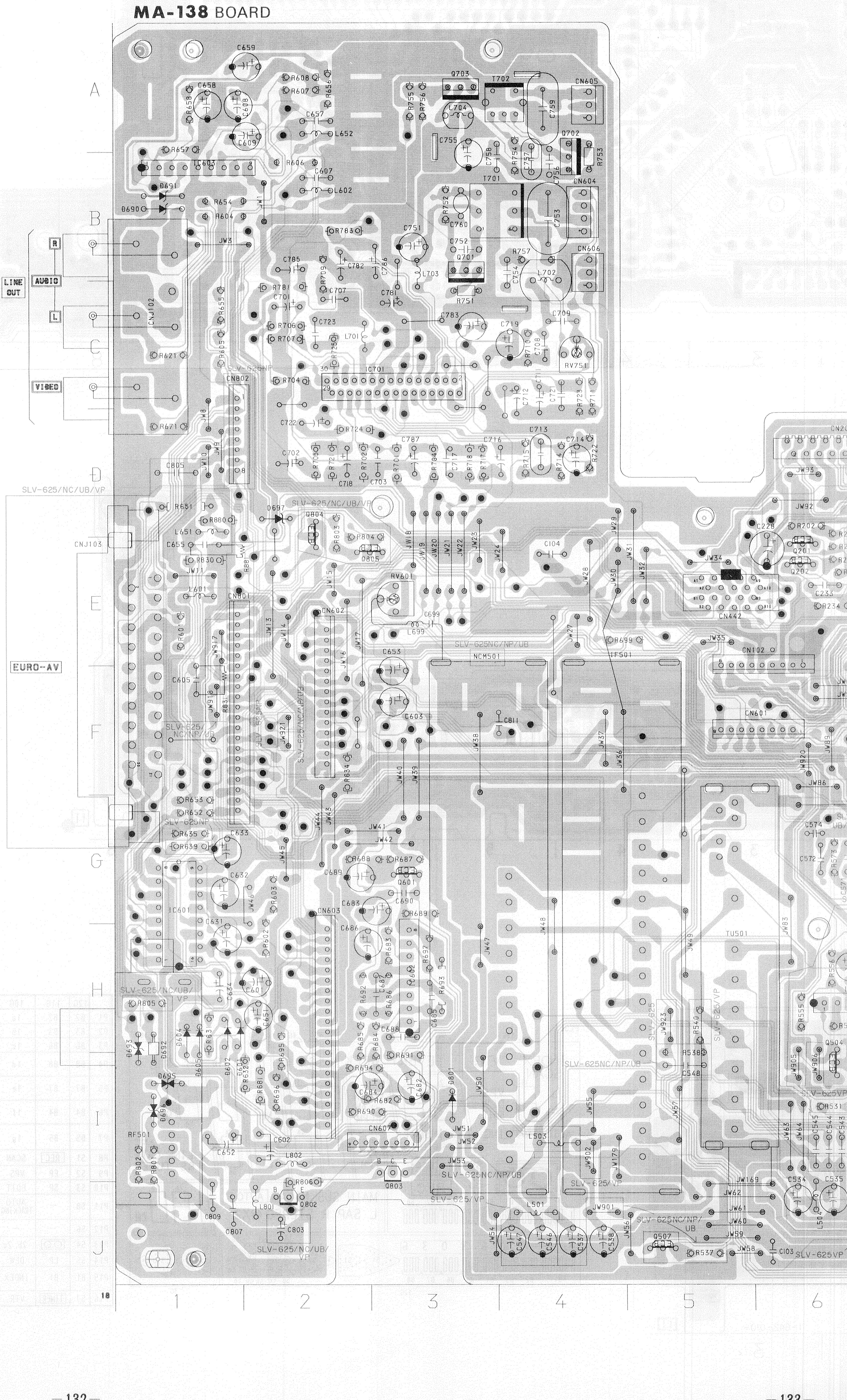
	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	B2	B2	1a	1a	D	1a	1a	—	1a	S10	1a	1a
P2	B3	B3	1b	1b	AM1	1b	1b	—	1b	S9	1b	1b
P3	B6	B6	1c	1c	H	1c	1c	M	1c	—	1c	1c
P4	B8	B8	1d	1d	—	1d	1d	col 2 DN 0	1d	SAP	1d	1d
P5	B7	B7	1e	1e	—	1e	1e	0 col 2 UP	1e	L	1e	1e
P6	B4	B4	1f	1f	—	1f	1f	0 col 1 UP	1f	—	1f	1f
P7	B5	B5	1g	1g	PM1	1g	1g	col 1 DN 0	1g	—	1g	1g
P8	S1	REC	SCAN	2a	OFF	2a	2a	2a	2a	R	2a	S
P9	S2	EP	VPS	2b	—	2b	2b	2b	2b	MAIN	2b	AFT
P10	S3	SP	EDIT	2c	—	2c	2c	2c	2c	NICAM	2c	TUNER
P11	S8	—	AUTO TRACKING	2d	PM2	2d	2d	2d	2d	X2	2d	—
P12	S6	—	—	2e	AM2	2e	2e	2e	2e	⊖	2e	BS
P13	S4	OO	2b, 2c	INSERT	—	2f	2f	2f	2f	SUB	2f	CATV
P14	S5	LP	DEW	2g	—	2g	2g	2g	2g	STEREO	2g	LINE
P15	B1	B1	INDEX	Λ	EVERY WEEK	Sa	Mo	Tu	Th	—	CH	—
P16	S7	TIMER	VTR	V	ON	Fr	Su	—	We	AUTO		

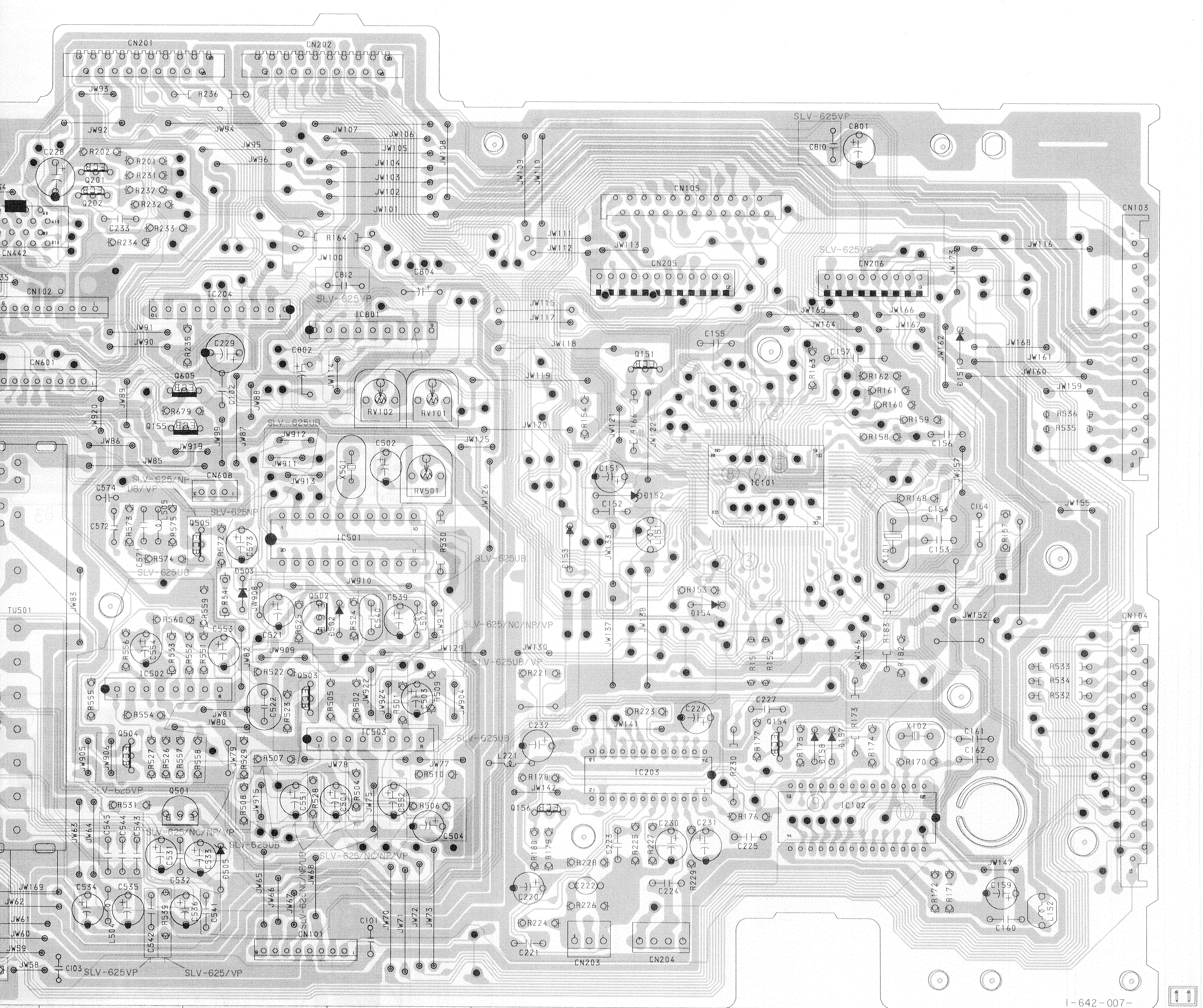
MA-138(TUNER, NICAM) PRINTED WIRING BOARD

—Ref. No. MA-138 BOARD : 3,000 series—

MA-138 BOARD

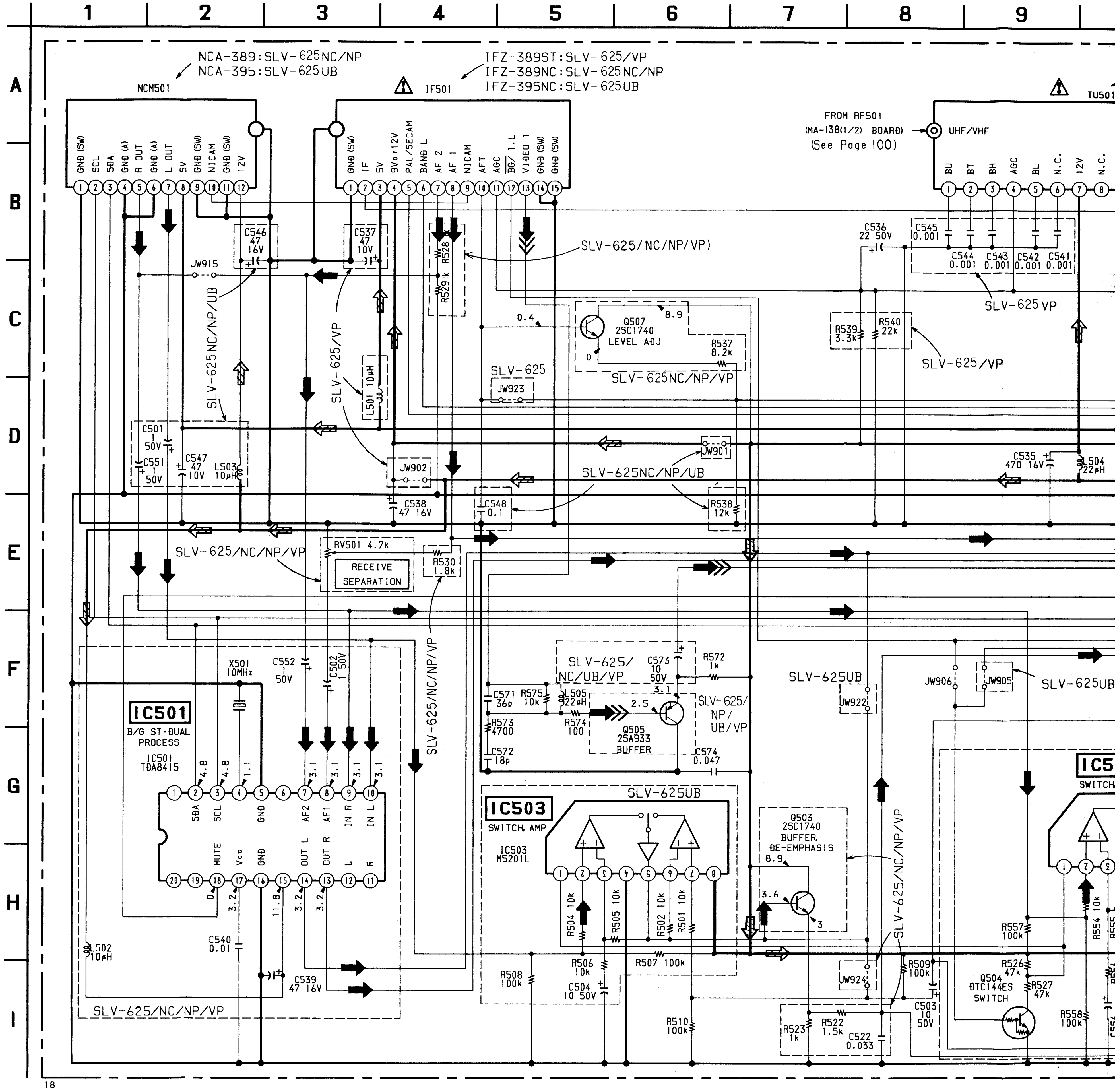
CN101	J-7
CN102	F-5
CN103	F-13
CN104	H-13
CN105	E-10
CN201	D-6
CN202	D-7
CN203	J-9
CN204	J-10
CN205	E-10
CN206	F-11
CN442	E-5
CN601	F-5
CN602	F-2
CN603	H-2
CN604	B-4
CN605	A-4
CN606	C-4
CN607	I-3
CN608	G-7
CN801	F-1
CN802	D-1
CNJ102	C-1
CNJ103	E-1
D151	F-12
D152	G-10
D153	G-9
D154	G-10
D157	H-11
D158	H-11
D502	H-8
D503	H-7
D505	I-7
D601	H-1
D602	H-1
D604	H-1
D605	H-1
D690	B-1
D691	B-1
D692	H-1
D693	H-1
D695	I-1
D696	I-1
D697	D-2
D801	I-3
IC101	G-11
IC102	I-11
IC203	I-10
IC204	F-7
IC501	G-8
IC502	H-6
IC503	H-8
IC601	G-1
IC602	H-3
IC603	B-1
IC701	C-3
IC801	F-8
Q151	F-10
Q154	H-11
Q155	F-6
Q156	I-9
Q201	E-6
Q202	E-6
Q501	I-6
Q502	H-7
Q503	H-7
Q504	I-6
Q505	G-7
Q507	J-5
Q601	G-3
Q605	F-6
Q701	B-3
Q702	B-4
Q703	A-3
Q802	J-2
Q803	I-3
Q804	D-2
Q805	E-2
RV101	F-8
RV102	F-8
RV501	G-8
RV601	E-3
RV751	C-4


MA-138 BOARD
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
LINE OUT
AUDIO
R
L
VIDEO
EURO-AV
CNJ102
CNJ103
IC701
IC601
CN802
CN801
CN602
CN603
CN607
NCM501
IF501
TU501
CN442
CN102
CN601
CN604
CN605
CN606
SLV-625/NC/UB/VP
SLV-625NC/NP/UB
SLV-625/VP
18


CN201
CN202
CN203
CN204
CN205
CN206
CN101
CN102
CN103
CN104
CN105
CN442
CN601
CN608
IC101
IC102
IC203
IC204
IC501
IC502
IC503
IC801
TU501
X101
X102
X501
RV101
RV102
RV501
Q151
Q154
Q155
Q156
Q201
Q202
Q501
Q502
Q503
Q504
Q505
Q605
D151
D152
D153
D154
D157
D158
D502
D503
D505
C801
C810
C812
C802
C804
C228
C229
C233
SLV-625VP
SLV-625UB
SLV-625/NP
SLV-625/NC/NP/VP
SLV-625UB/VP
SLV-625/VP
1-642-007-
11
6
7
8
9
10
11
12
13

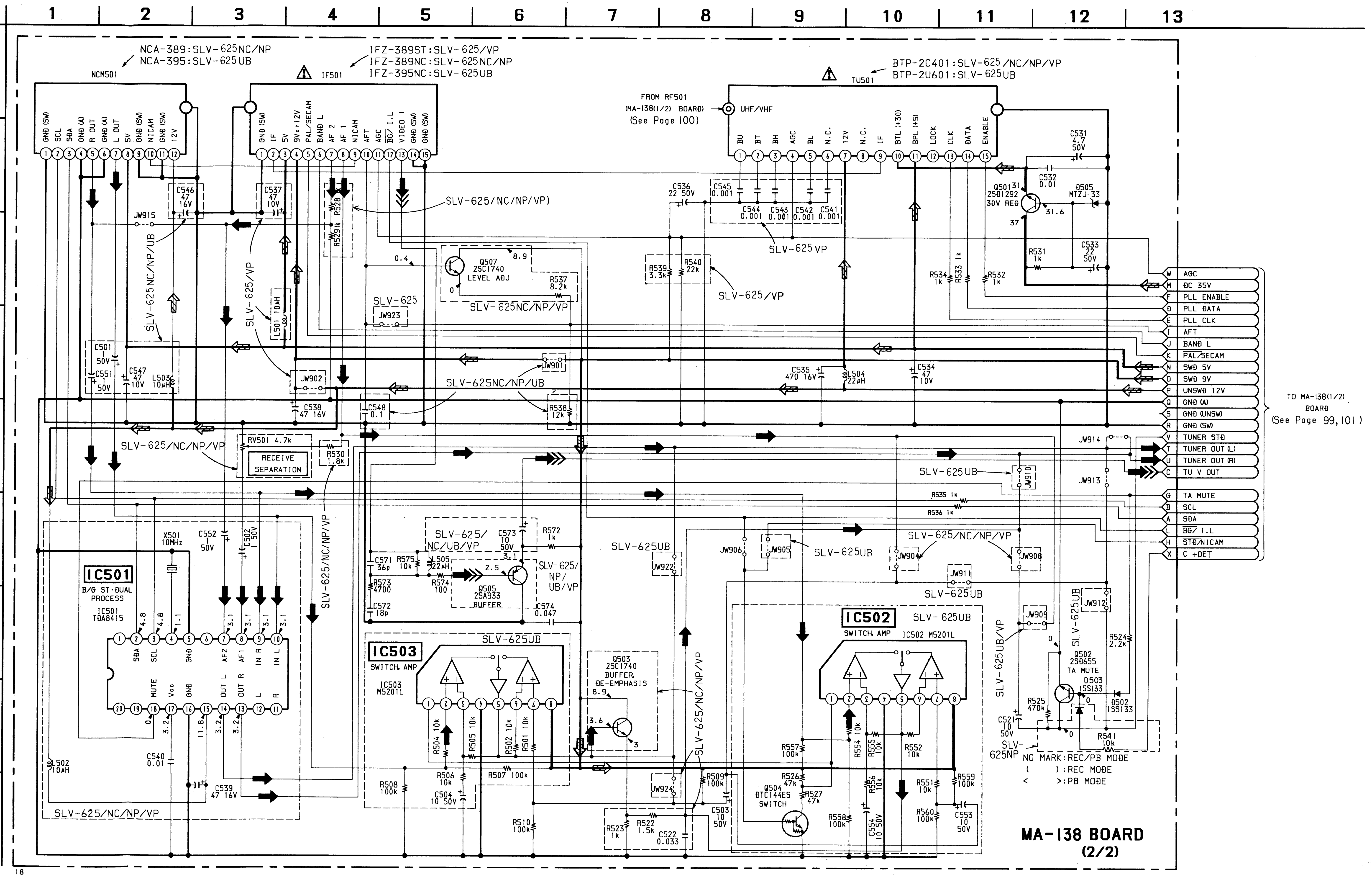
MA-138(TUNER, NICAM) SCHEMATIC DIAGRAM

—Ref. No. MA-138 BOARD: 3,000 series—

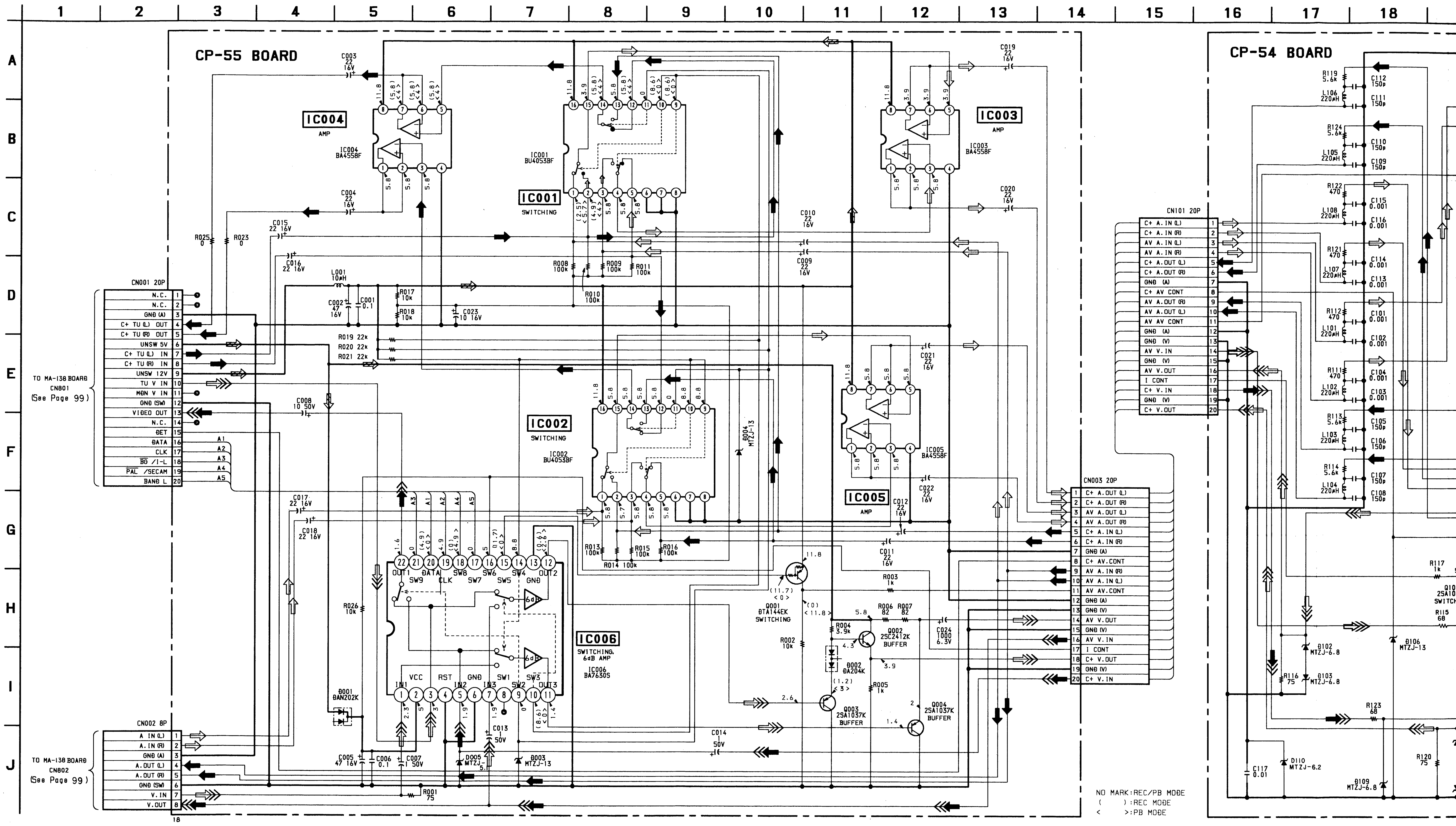

1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
G
H
I
NCA-389 : SLV-625NC/NP
NCA-395 : SLV-625UB
NCM501
IFZ-389ST : SLV-625/VP
IFZ-389NC : SLV-625NC/NP
IFZ-395NC : SLV-625UB
IF501
GND (SW)
SCL
SDA
GND (A)
R OUT
GND (A)
L OUT
5V
GND (SW)
NICAM
GND (SW)
12V
IF
9V or 12V
PAL/SECAM
BAND L
AF 2
AF 1
AFT
AGC
BG/I.L
VIDEO 1
FROM RF501
(MA-138(1/2) BOARD)
(See Page 100)
UHF/VHF
TU501
BU
BT
BH
BL
N.C.
C546 47 16V
C537 47 10V
R528
R529 1k
JW915
SLV-625/NC/NP/VP)
SLV-625NC/NP/UB
SLV-625/VP
Q507 2SC1740 LEVEL ADJ
8.9
0.4
R537 8.2k
SLV-625
JW923
SLV-625NC/NP/VP
L501 10µH
C536 22 50V
C545 0.001
C544 0.001
C543 0.001
C542 0.001
C541 0.001
SLV-625 VP
R539 3.3k
R540 22k
C501 1 50V
C551 1 50V
C547 47 10V
L503 10µH
JW902
JW901
C538 47 16V
C548 0.1
SLV-625NC/NP/UB
R538 12k
C535 470 16V
L504 22µH
SLV-625/NC/NP/VP
RV501 4.7k
RECEIVE SEPARATION
R530 1.8k
X501 10MHz
C552 1 50V
C502 1 50V
IC501
B/G ST·DUAL PROCESS
IC501 TDA8415
SDA
SCL
GND
AF2
AF1
IN R
IN L
MUTE
Vcc
OUT L
OUT R
L
R
4.8
1.1
3.1
3.2
11.8
L502 10µH
C540 0.01
C539 47 16V
SLV-625/ NC/UB/VP
C573 10 50V
R572 1k
C571 36p
R575 10k
L505 22µH
R573 4700
R574 100
2.5
Q505 2SA933 BUFFER
SLV-625/ NP/ UB/VP
C572 18p
C574 0.047
SLV-625UB
JW922
JW906
JW905
SLV-625UB
IC503
SWITCH, AMP
IC503 M5201L
R504 10k
R505 10k
R502 10k
R501 10k
R506 10k
R507 100k
R508 100k
C504 10 50V
R510 100k
Q503 2SC1740 BUFFER, DE-EMPHASIS
3.6
JW924
R509 100k
R523 1k
R522 1.5k
C522 0.033
C503 10 50V
R557 100k
R526 47k
Q504 DTC144ES SWITCH
R527 47k
R558 100k
R554 10k
IC5
SWITCH
18

·SIGNAL PATH

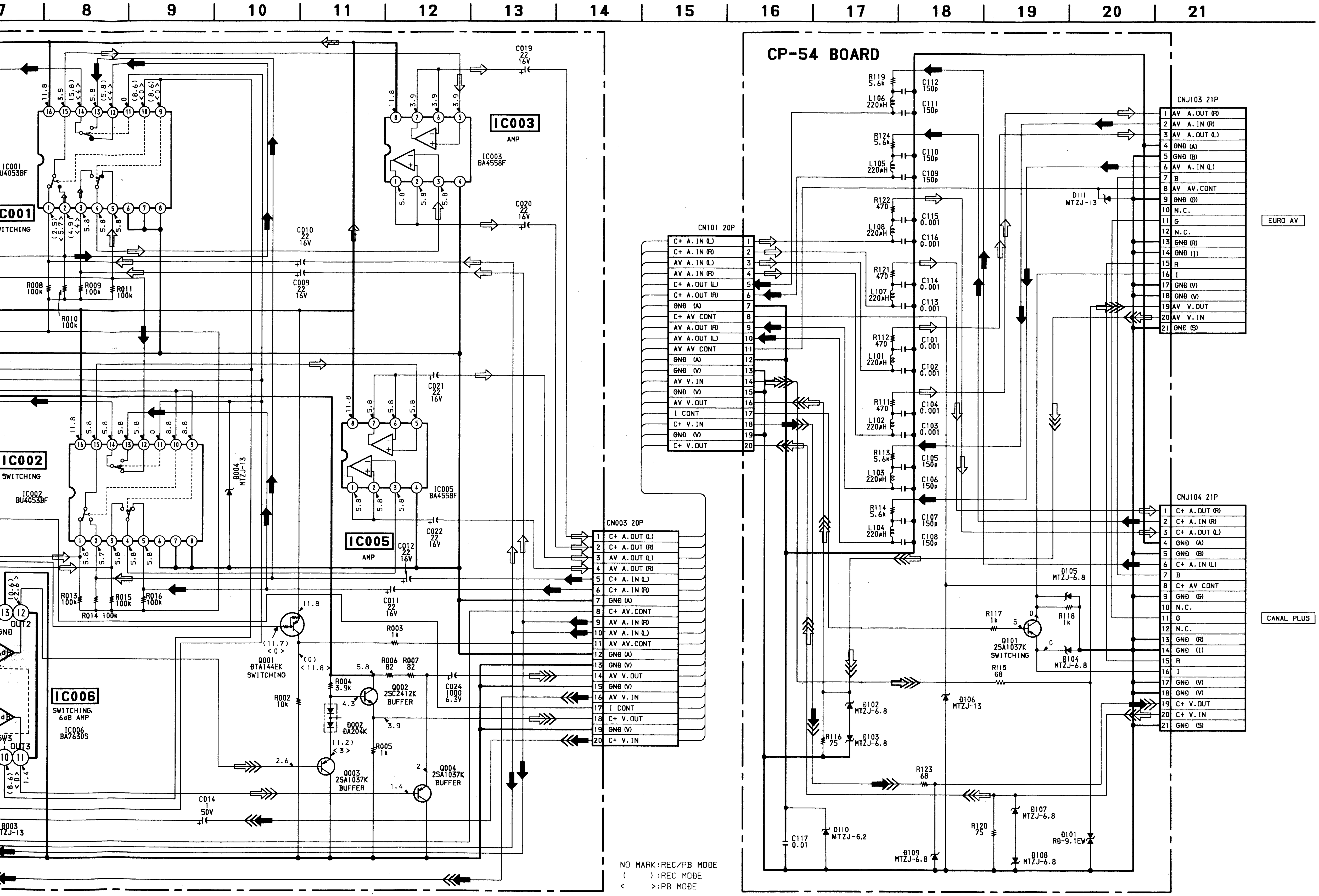
	VIDEO Signal			AUDIO Signal
	CHROMA	Y	Y/CHROMA	
REC			⇛	➡
PB				


MA-138 BOARD (2/2)
NCA-389:SLV-625NC/NP
NCA-395:SLV-625UB
NCM501
IFZ-389ST:SLV-625/VP
IFZ-389NC:SLV-625NC/NP
IFZ-395NC:SLV-625UB
IF501
BTP-2C401:SLV-625/NC/NP/VP
BTP-2U601:SLV-625UB
TU501
FROM RF501 (MA-138(1/2) BOARD) (See Page 100)
UHF/VHF
GND (SW)
SCL
SDA
GND (A)
R OUT
L OUT
5V
NICAM
12V
IF
9V or 12V
PAL/SECAM
BAND L
AF 2
AF 1
AFT
AGC
BG/I.L
VIDEO 1
BU
BT
BH
BL
N.C.
BTL (+30)
BPL (+5)
LOCK
CLK
DATA
ENABLE
Q501 2SD1292 30V REG
D505 MTZJ-33
Q507 2SC1740 LEVEL ADJ
Q505 2SA933 BUFFER
Q503 2SC1740 BUFFER DE-EMPHASIS
Q504 DTC144ES SWITCH
Q502 2SD655 TA MUTE
D503 1SS133
D502 1SS133
IC501 B/G ST·DUAL PROCESS IC501 TDA8415
IC503 SWITCH AMP IC503 M5201L
IC502 SWITCH AMP IC502 M5201L
X501 10MHz
RV501 4.7k RECEIVE SEPARATION
SLV-625/NC/NP/VP)
SLV-625NC/NP/UB
SLV-625/VP
SLV-625VP
SLV-625UB
SLV-625
SLV-625NP
TO MA-138(1/2) BOARD (See Page 99,101)
W AGC
M DC 35V
F PLL ENABLE
D PLL DATA
E PLL CLK
I AFT
J BAND L
K PAL/SECAM
N SWD 5V
O SWD 9V
P UNSWD 12V
Q GND (A)
S GND (UNSW)
R GND (SW)
V TUNER STD
T TUNER OUT (L)
U TUNER OUT (R)
C TU V OUT
G TA MUTE
B SCL
A SDA
L BG/I.L
H STD/NICAM
X C +DET
NO MARK:REC/PB MODE
( ):REC MODE
< >:PB MODE

CP-54(EURO AV, CANAL PLUS), CP-55(CANAL SELECTOR) SCHEMATIC DIAGRAMS –Ref.No. CP-54,CP-55 BOARDS: 5,000 series– (SLV-625NP ONLY)


CP-55 BOARD
CP-54 BOARD
IC004 AMP
IC004 BA4558F
IC001 BU4053BF
IC001 SWITCHING
IC003 AMP
IC003 BA4558F
IC002 SWITCHING
IC002 BU4053BF
IC005 AMP
IC005 BA4558F
IC006 SWITCHING, 6dB AMP
IC006 BA7630S
Q001 DTA144EK SWITCHING
Q002 2SC2412K BUFFER
Q003 2SA1037K BUFFER
Q004 2SA1037K BUFFER
D001 DAN202K
D002 DA204K
D003 MTZJ-13
D004 MTZJ-13
D005 MTZJ-5.1
CN001 20P
N.C.
N.C.
GND (A)
C+ TU (L) OUT
C+ TU (R) OUT
UNSW 5V
C+ TU (L) IN
C+ TU (R) IN
UNSW 12V
TU V IN
MON V IN
GND (SW)
VIDEO OUT
N.C.
DET
DATA
CLK
BG /I-L
PAL /SECAM
BAND L
TO MA-138 BOARD CN801 (See Page 99)
CN002 8P
A IN (L)
A.IN (R)
GND (A)
A.OUT (L)
A.OUT (R)
GND (SW)
V.IN
V.OUT
TO MA-138 BOARD CN802 (See Page 99)
CN003 20P
C+ A.OUT (L)
C+ A.OUT (R)
AV A.OUT (L)
AV A.OUT (R)
C+ A.IN (L)
C+ A.IN (R)
GND (A)
C+ AV.CONT
AV A.IN (R)
AV A.IN (L)
AV AV.CONT
GND (A)
GND (V)
AV V.OUT
GND (V)
AV V.IN
I CONT
C+ V.OUT
GND (V)
C+ V.IN
CN101 20P
C+ A.IN (L)
C+ A.IN (R)
AV A.IN (L)
AV A.IN (R)
C+ A.OUT (L)
C+ A.OUT (R)
GND (A)
C+ AV CONT
AV A.OUT (R)
AV A.OUT (L)
AV AV CONT
GND (A)
GND (V)
AV V.IN
GND (V)
AV V.OUT
I CONT
C+ V.IN
GND (V)
C+ V.OUT
NO MARK:REC/PB MODE
( ):REC MODE
< >:PB MODE

CANAL PLUS CANAL PL


7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
CP-54 BOARD
IC001
SWITCHING
IC001 BU4053BF
IC002
SWITCHING
IC002 BU4053BF
IC003
AMP
IC003 BA4558F
IC005
AMP
IC005 BA4558F
IC006
SWITCHING, 6dB AMP
IC006 BA7630S
Q001 DTA144EK SWITCHING
Q002 2SC2412K BUFFER
Q003 2SA1037K BUFFER
Q004 2SA1037K BUFFER
Q101 2SA1037K SWITCHING
D002 DA204K
D003 MTZJ-13
D004 MTZJ-13
D101 RD-9.1EW
D102 MTZJ-6.8
D103 MTZJ-6.8
D104 MTZJ-6.8
D105 MTZJ-6.8
D106 MTZJ-13
D107 MTZJ-6.8
D108 MTZJ-6.8
D109 MTZJ-6.8
D110 MTZJ-6.2
D111 MTZJ-13
C009 22 16V
C010 22 16V
C011 22 16V
C012 22 16V
C014 1 50V
C019 22 16V
C020 22 16V
C021 22 16V
C022 22 16V
C024 1000 6.3V
C117 0.01
R002 10k
R003 1k
R004 3.9k
R005 1k
R006 82
R007 82
R008 100k
R009 100k
R010 100k
R011 100k
R013 100k
R014 100k
R015 100k
R016 100k
R115 68
R116 75
R117 1k
R118 1k
R120 75
R123 68
CN101 20P
1 C+ A.IN (L)
2 C+ A.IN (R)
3 AV A.IN (L)
4 AV A.IN (R)
5 C+ A.OUT (L)
6 C+ A.OUT (R)
7 GND (A)
8 C+ AV CONT
9 AV A.OUT (R)
10 AV A.OUT (L)
11 AV AV CONT
12 GND (A)
13 GND (V)
14 AV V.IN
15 GND (V)
16 AV V.OUT
17 I CONT
18 C+ V.IN
19 GND (V)
20 C+ V.OUT
CN003 20P
1 C+ A.OUT (L)
2 C+ A.OUT (R)
3 AV A.OUT (L)
4 AV A.OUT (R)
5 C+ A.IN (L)
6 C+ A.IN (R)
7 GND (A)
8 C+ AV.CONT
9 AV A.IN (R)
10 AV A.IN (L)
11 AV AV.CONT
12 GND (A)
13 GND (V)
14 AV V.OUT
15 GND (V)
16 AV V.IN
17 I CONT
18 C+ V.OUT
19 GND (V)
20 C+ V.IN
CNJ103 21P
1 AV A.OUT (R)
2 AV A.IN (R)
3 AV A.OUT (L)
4 GND (A)
5 GND (B)
6 AV A.IN (L)
7 B
8 AV AV.CONT
9 GND (G)
10 N.C.
11 G
12 N.C.
13 GND (R)
14 GND (I)
15 R
16 I
17 GND (V)
18 GND (V)
19 AV V.OUT
20 AV V.IN
21 GND (S)
EURO AV
CNJ104 21P
1 C+ A.OUT (R)
2 C+ A.IN (R)
3 C+ A.OUT (L)
4 GND (A)
5 GND (B)
6 C+ A.IN (L)
7 B
8 C+ AV CONT
9 GND (G)
10 N.C.
11 G
12 N.C.
13 GND (R)
14 GND (I)
15 R
16 I
17 GND (V)
18 GND (V)
19 C+ V.OUT
20 C+ V.IN
21 GND (S)
CANAL PLUS

NO MARK : REC/PB MODE
( ) : REC MODE
< > : PB MODE

·SIGNAL PATH

	VIDEO Signal			AUDIO Signal
	CHROMA	Y	Y/CHROMA	
REC			➡⟫	➡
PB			⇨⟫	⇨

CP-54(EURO AV, CANAL PLUS), CP-55(CANAL SELECTOR) PRINTED WIRING BOARDS (SLV-625NP ONLY)

—Ref.No. CP-54,CP-55 BOARDS: 5,000 series—

< DIODE >

D101	8-719-108-12	DIODE	RD9. 1E-W
D102	8-719-109-97	DIODE	RD6. 8ES-B2
D103	8-719-109-97	DIODE	RD6. 8ES-B2
D104	8-719-109-97	DIODE	RD6. 8ES-B2
D105	8-719-109-97	DIODE	RD6. 8ES-B2
D106	8-719-921-86	DIODE	MTZJ-13
D107	8-719-109-97	DIODE	RD6. 8ES-B2
D108	8-719-109-97	DIODE	RD6. 8ES-B2
D109	8-719-109-97	DIODE	RD6. 8ES-B2
D110	8-719-921-40	DIODE	MTZJ-6. 2B
D111	8-719-921-86	DIODE	MTZJ-13

< TRANSISTOR >

Q101	8-729-216-22	TRANSISTOR	2SA1162-G

CP-54 BOARD

CN101	A-3
CNJ103	C-2
CNJ104	A-2
D101	B-3
D102	B-3
D103	B-4
D104	B-3
D105	B-3
D106	B-2
D107	B-4
D108	B-4
D109	B-4
D110	A-3
D111	B-2
Q101	B-3

< DIODE >

D001	8-719-400-18	DIODE	MA152WK
D002	8-719-800-76	DIODE	1SS226
D003	8-719-921-86	DIODE	MTZJ-13
D004	8-719-921-86	DIODE	MTZJ-13
D005	8-719-921-42	DIODE	MTZJ-5. 1A

< IC >

IC001	8-759-932-67	IC	BU4053BF
IC002	8-759-932-67	IC	BU4053BF
IC003	8-759-909-71	IC	BA4558F
IC004	8-759-909-71	IC	BA4558F
IC005	8-759-909-71	IC	BA4558F
IC006	8-759-504-94	IC	BA7630S

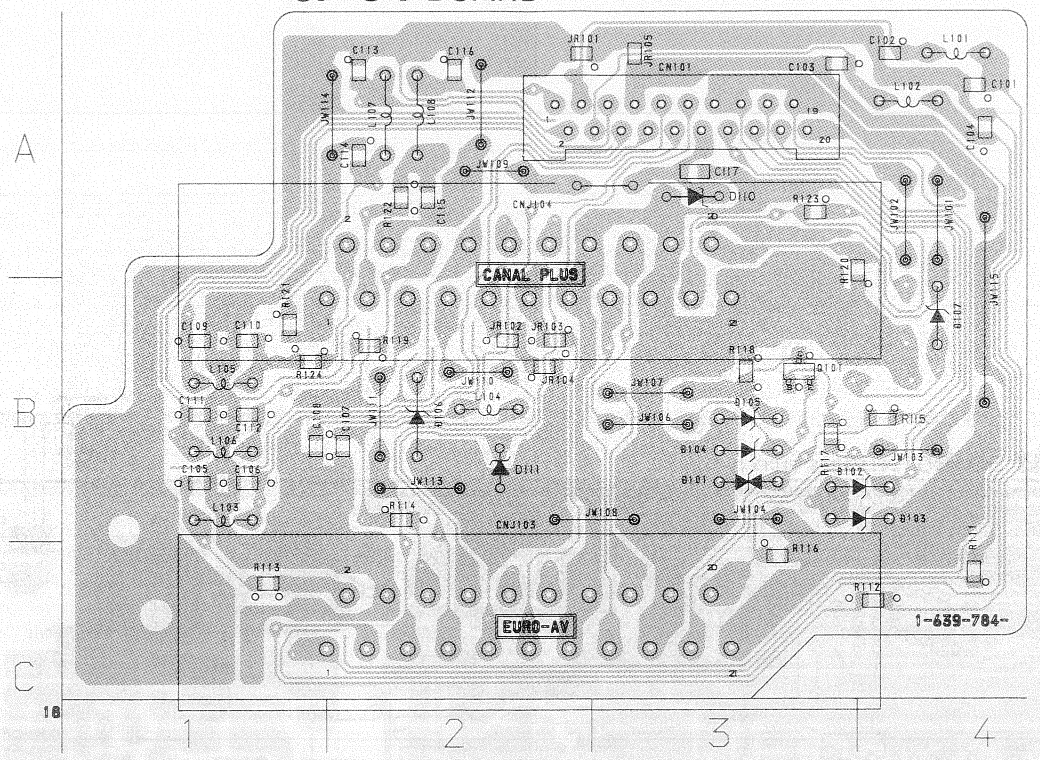
< TRANSISTOR >

Q001	8-729-901-06	TRANSISTOR	DTA144EK
Q002	8-729-920-74	TRANSISTOR	2SC2412K-QR
Q003	8-729-216-22	TRANSISTOR	2SA1162-G
Q004	8-729-216-22	TRANSISTOR	2SA1162-G

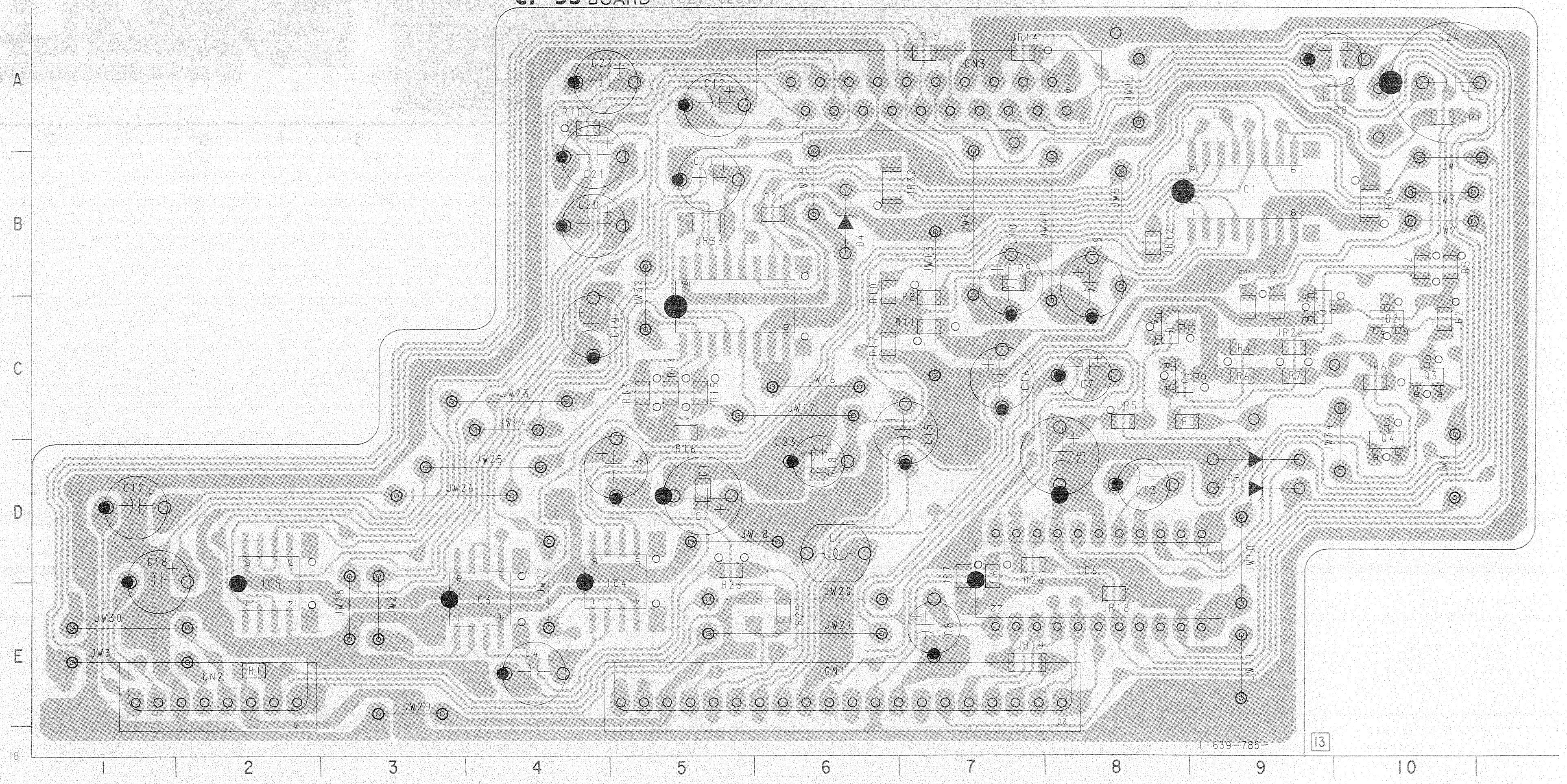
CP-55 BOARD

CN001	E-6
CN002	E-2
CN003	A-6
D001	C-8
D002	C-10
D003	D-9
D004	B-6
D005	D-9
IC001	B-9
IC002	C-5
IC003	E-4
IC004	E-5
IC005	E-2
IC006	E-8
Q001	C-9
Q002	C-8
Q003	C-10
Q004	C-10

CP-54 BOARD (SLV-625NP)



CP-55 BOARD (SLV-625NP)



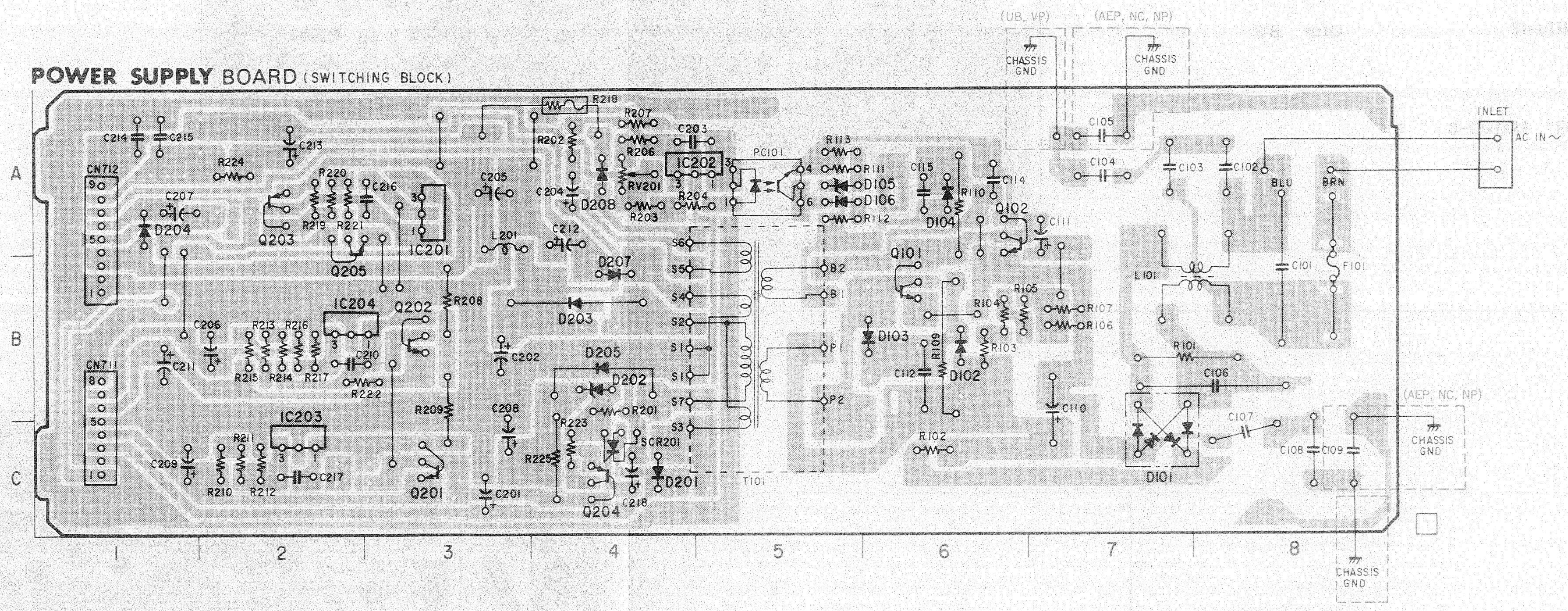
POWER BLOCK PRINTED WIRING BOARD

— Ref. No. POWER BLOCK: 8000 series —

POWER BLOCK

CN711	B-1
CN712	A-1
D101	C-7
D102	B-6
D103	B-6
D104	A-6
D105	A-5
D106	A-5
D201	C-4
D202	B-4
D203	B-4
D204	A-1
D205	B-4
D207	B-4
D208	A-4
IC201	A-1
IC202	A-5
IC203	C-2
IC204	B-2
PC101	A-5
Q101	B-6
Q102	A-6
Q201	C-3
Q202	B-3
Q203	A-2
Q204	C-4
Q205	A-2
RV201	A-4
SCR201	C-4

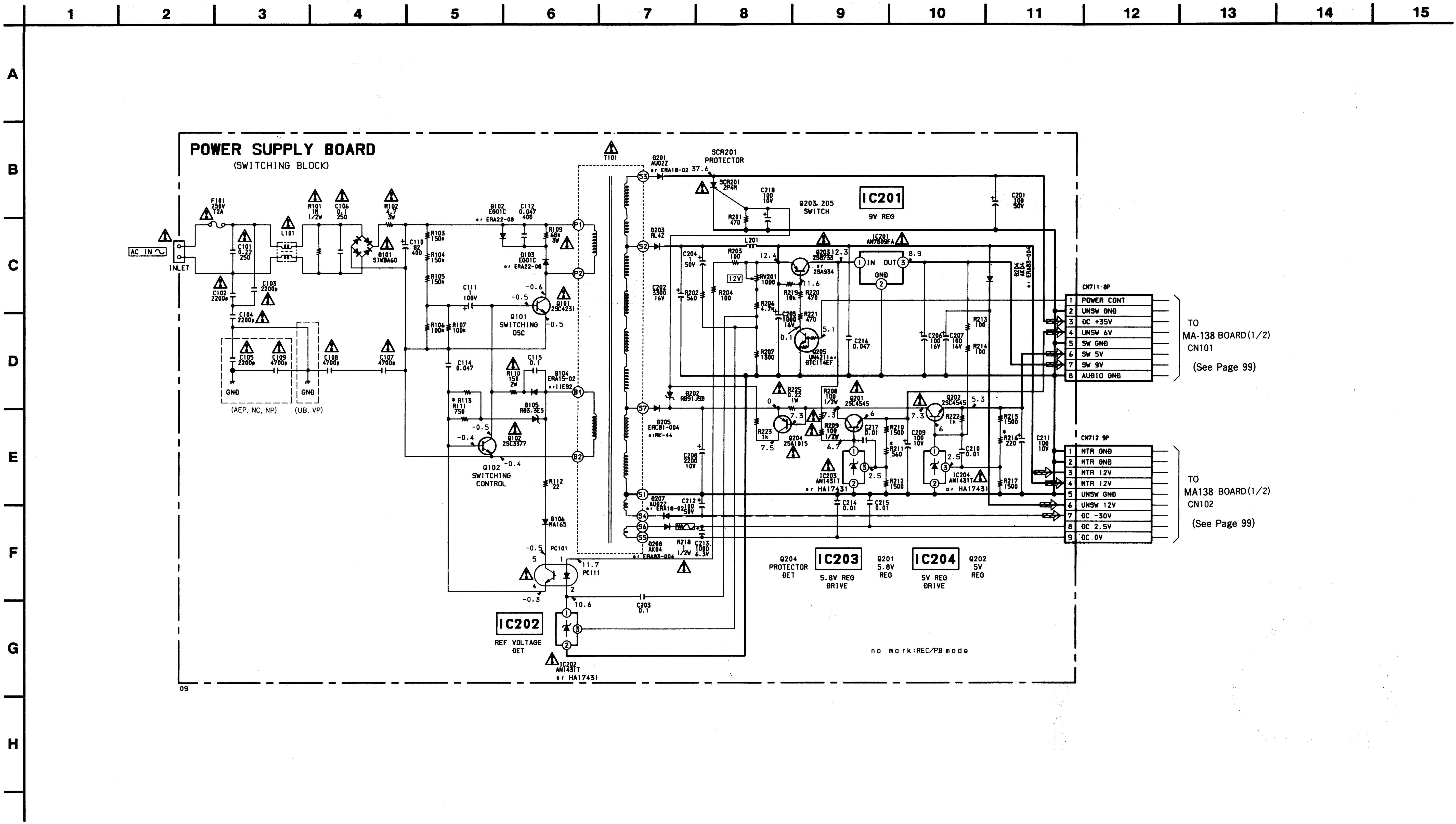
POWER SUPPLY BOARD (SWITCHING BLOCK)



(UB, VP)
(AEP, NC, NP)
CHASSIS GND
INLET
AC IN~
A
B
C
1
2
3
4
5
6
7
8
CN712
CN711
D204
C207
C214
C215
C213
R224
R220
C216
R215
R221
Q203
Q205
IC201
C205
L201
C204
C212
R218
R202
R207
R206
C203
IC202
RV201
D208
R204
R203
PC101
R113
R111
R112
D105
D106
C115
R110
D104
C114
Q102
C111
C105
C104
C103
C102
BLU
BRN
L101
C101
F101
Q101
R105
R104
R107
R106
R103
D103
R109
D102
C112
R101
C106
C110
C107
C108
C109
D101
R102
T101
S6
S5
S4
S2
S1
S7
S3
B2
B1
P1
P2
D207
D203
D205
D202
R201
R208
R209
C208
R223
SCR201
R225
Q204
C218
D201
C201
Q201
Q202
C202
IC204
R213
R216
R217
R214
C206
C210
C211
R222
IC203
R211
R210
R212
C217
C209

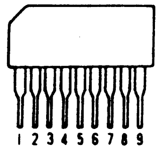
POWER BLOCK SCHEMATIC DIAGRAM

— Ref. No. POWER BLOCK: 8000 series —

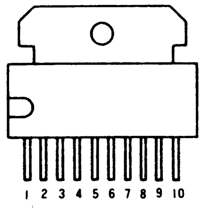

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F
G
H
POWER SUPPLY BOARD
(SWITCHING BLOCK)
AC IN
INLET
F101 250V T2A
C101 0.22 250
C102 2200p
C103 2200p
C104 2200p
C105 2200p
C109 4700p
C108 4700p
C107 4700p
GND
(AEP, NC, NP)
(UB, VP)
L101
R101 1M 1/2W
C106 0.1 250
R102 4.7 3W
D101 S1WBA60
C110 82 400
R103 150k
R104 150k
R105 150k
R106 100k
R107 100k
D102 EG01C or ERA22-08
C112 0.047 400
D103 EG01C or ERA22-08
R109 68k 3W
C111 1 100V
Q101 2SC4231
Q101 SWITCHING OSC
C114 0.047
C115 0.1
R110 150 2W
D104 ERA15-02 or 11ES2
* R113 R111 750
D105 RD3.3ES
Q102 2SC3377
Q102 SWITCHING CONTROL
R112 22
D106 MA165
PC101
PC111
T101
C203 0.1
IC202
REF VOLTAGE DET
IC202 AN1431T or HA17431
D201 AU02Z or ERA18-02
SCR201 PROTECTOR
SCR201 2P4M
C218 100 10V
R201 470
Q203, 205 SWITCH
IC201
9V REG
C201 100 50V
D203 RL4Z
L201
C204 1 50V
C202 3300 16V
R202 560
R203 100
R204 100
12V
RV201 1000
Q203 2SB733 or 2SA934
R219 10k
R220 470
R206 4.7k
C205 1000 16V
R221 470
Q205 UN4211 or DTC114EF
R207 1300
IC201 AN7809FA
IN
OUT
GND
C216 0.047
C206 100 16V
C207 100 16V
R213 100
R214 100
D204 AK04 or ERA83-004
D202 RD9.1JSB
D205 ERC81-004 or RK-44
R225 0.22 1W
R223 1k
Q204 2SA1015
R208 100 1/2W
R209 100 1/2W
Q201 2SC4545
C217 0.01
R210 1500
R211 560
C209 100 10V
Q202 2SC4545
R222 1k
R215 1500
R216 220
C210 0.01
C211 100 10V
C208 2200 10V
IC203 AN1431T or HA17431
R212 1500
IC204 AN1431T or HA17431
R217 1500
C214 0.01
C215 0.01
D207 AU02Z or ERA18-02
C212 100 50V
D208 AK04 or ERA83-004
R218 1 1/2W
C213 1000 6.3V
Q204 PROTECTOR DET
IC203
5.8V REG DRIVE
Q201 5.8V REG
IC204
5V REG DRIVE
Q202 5V REG
no mark:REC/PB mode
CN711 8P
1 POWER CONT
2 UNSW GND
3 DC +35V
4 UNSW 6V
5 SW GND
6 SW 5V
7 SW 9V
8 AUDIO GND
TO MA-138 BOARD (1/2) CN101
(See Page 99)
CN712 9P
1 MTR GND
2 MTR GND
3 MTR 12V
4 MTR 12V
5 UNSW GND
6 UNSW 12V
7 DC -30V
8 DC 2.5V
9 DC 0V
TO MA138 BOARD (1/2) CN102
(See Page 99)
09

4-3. SEMICONDUCTORS

BA6138
BA7021
LVA519S

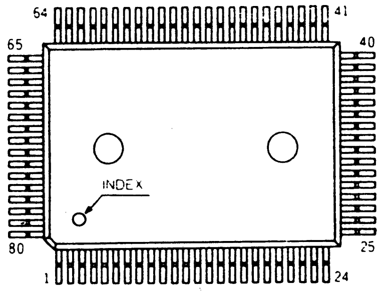


BA6238A


1 2 3 4 5 6 7 8 9 10

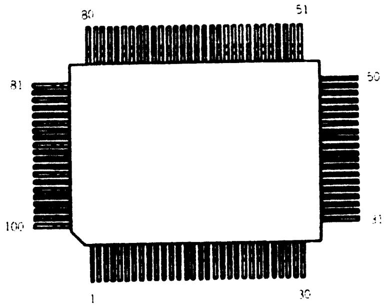
MARKING SIDE VIEW

CXP50116-274Q

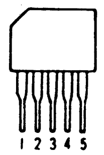

64
41
65
40
INDEX
80
25
1
24

MARKING SIDE VIEW

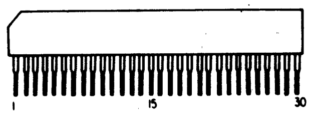
CXPP80624-258Q


80
51
81
50
100
31
1
30

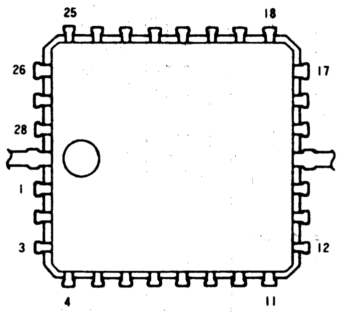
LA7213



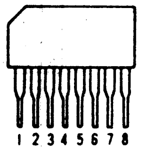
LA7297



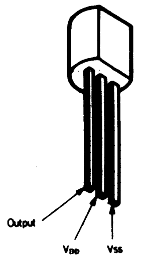
HA12115MP


25
18
26
17
28
1
3
12
4
11

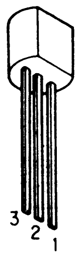
M5201L



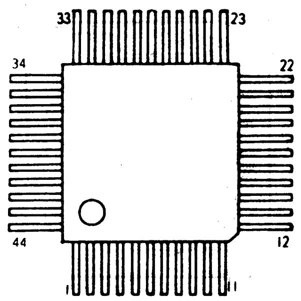
S-8053ALB


Output
VDD
VSS

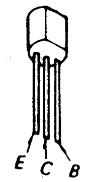
S-8054ALR-Z



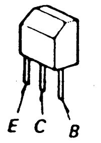
μPD75004GB-VSX182


33
23
34
22
44
12
1
11

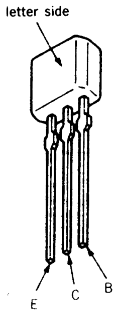
2SA933S-QR
2SD655-E



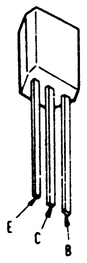
2SB733-34
2SD774-34



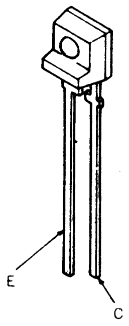
2SA1175-HFE
2SC2785-HFE
DTA143XS


letter side
E
C
B

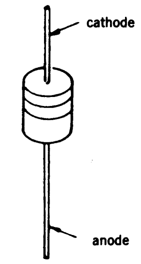
2SC2999C, D, E
DTA114ES
DTA144ES
DTC114ES
DTC144ES



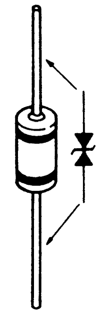
PT483F1S



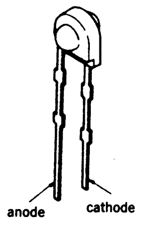
1SR139-100
1SS119
MTZJ-33B
MTZJ-4.7
MTZJ-5.1A
MTZJ-6.2B
RD5.1ES-B2
RD6.2ES-B2
RD6.8ES-B2
RD8.2ES-B2
RD13ESB2
RD33ESB2


cathode
anode

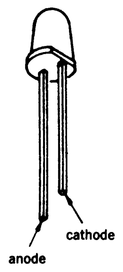
RD9.1EW



GL451VS1


anode
cathode

SLR34MC3


cathode
anode

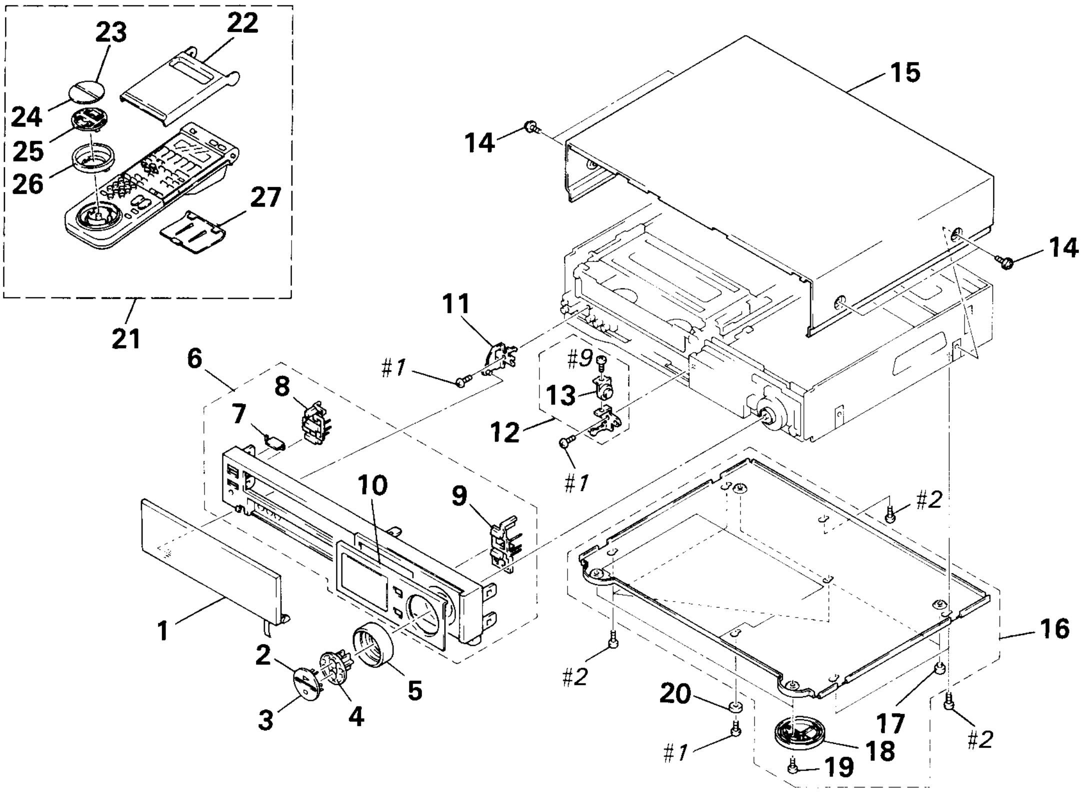
SECTION 5
EXPLODED VIEWS

NOTE:
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE(WHITE)...(RED),
  ↑ ↑
  Parts color Cabinet's color

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- hardware (#mark) list is given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

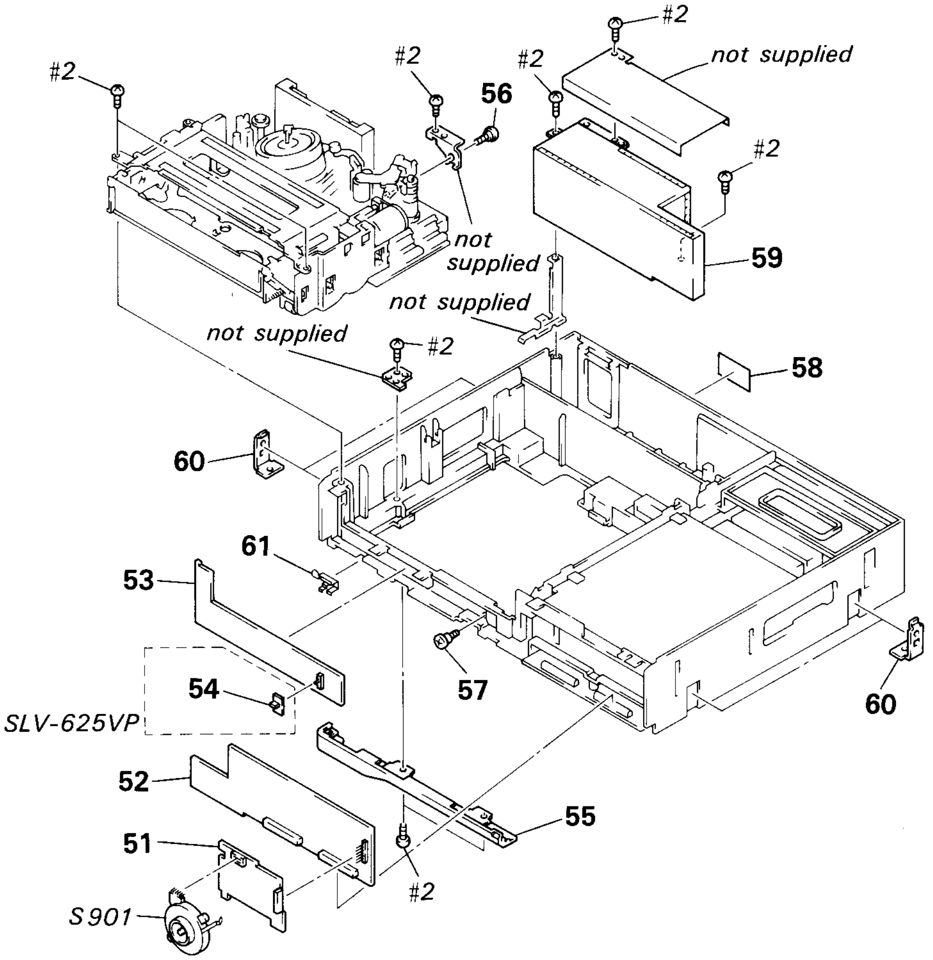
5-1. FRONT PANEL AND CABINET ASSEMBLIES



Ref. No.	Part No.	Description	Remark
1	1-466-579-61	SW BLOCK, CONTROL (SLV-625)	
1	1-466-579-71	SW BLOCK, CONTROL (SLV-625VP)	
1	1-466-579-81	SW BLOCK, CONTROL (SLV-625NC/UB)	
1	1-466-579-91	SW BLOCK, CONTROL (SLV-625NP)	
2	3-946-834-01	BUTTON, PLAY	
3	3-946-835-01	BUTTON, STOP	
4	3-941-515-01	HOLDER, BUTTON	
5	3-943-988-01	RING, SHUTTLE	
6	X-3941-310-1	PANEL ASSY, FRONT (SLV-625VP)	
6	X-3941-312-1	PANEL ASSY, FRONT (SLV-625/NC/NP/UB)	
7	3-941-518-11	TIP, POWER BUTTON	
8	3-942-836-01	BUTTON, POWER EJECT	
9	3-941-521-01	BUTTON, PAUSE	
10	3-946-823-01	PLATE, TRANSPARENT	
11	X-3940-665-1	PLATE (R) ASSY, FULCRUM	
12	X-3940-663-1	PLATE (L) ASSY, FULCRUM	

Ref. No.	Part No.	Description	Remark
13	3-354-963-01	DAMPER	
14	3-710-901-11	SCREW (TP3X8), CASE	
15	3-741-985-01	CASE, UPPER	
16	A-6703-723-A	PLATE BLOCK ASSY, BUTTOM	
17	3-697-937-01	LEG	
18	3-946-825-01	INSULATOR	
19	3-721-343-01	SCREW, FIXED, M4X7	
* 20	3-946-824-01	FOOT (A)	
21	1-465-724-51	REMOTE COMMANDER (RMT-V118)	
22	3-947-724-01	COVER, TIMER	
23	3-941-617-01	BUTTON, PLAYBACK	
24	3-941-618-01	BUTTON, STOP	
25	3-941-619-01	HOLDER, DIAL	
26	3-941-616-01	RING, SHUTTLE	
27	3-744-080-01	COVER, BATTERY	

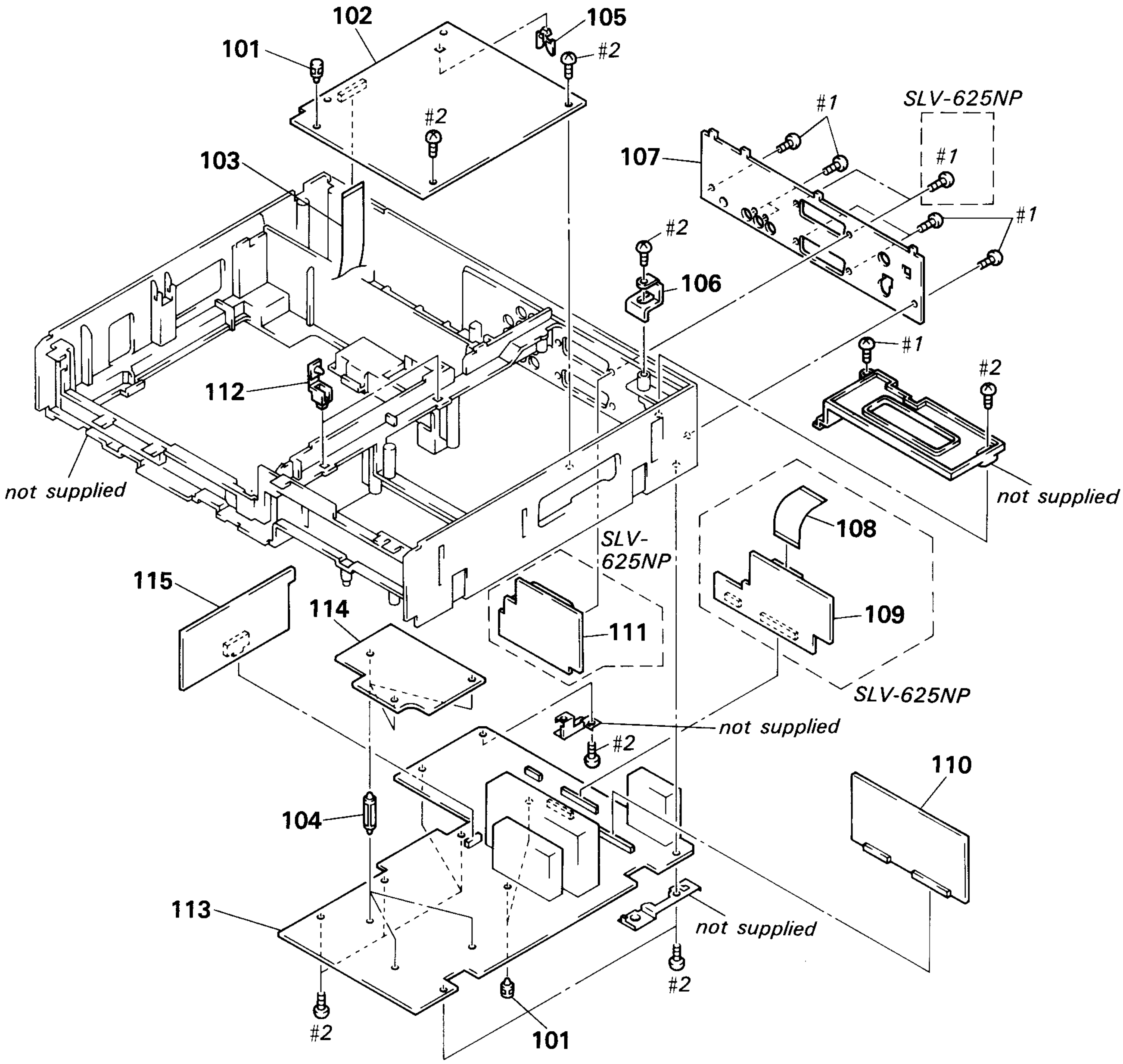
5-2. MODE CONTROL AND POWER BLOCK ASSEMBLIES



Ref. No.	Part No.	Description	Remark
* 51	A-6720-456-A	MF-164 BOARD, COMPLETE	
* 52	A-6721-451-A	MF-162 BOARD, COMPLETE (SLV-625NC)	
* 52	A-6721-452-A	MF-162 BOARD, COMPLETE (SLV-625UB)	
* 52	A-6721-453-A	MF-162 BOARD, COMPLETE (SLV-625NP)	
* 52	A-6721-454-A	MF-162 BOARD, COMPLETE (SLV-625VP)	
* 52	A-6721-457-A	MF-162 BOARD, COMPLETE (SLV-625)	
* 53	A-6754-414-A	MF-163 BOARD, COMPLETE (SLV-625UB)	
* 53	A-6754-415-A	MF-163 BOARD, COMPLETE (SLV-625/NC/NP)	
* 53	A-6754-416-A	MF-163 BOARD, COMPLETE (SLV-625VP)	
54	3-744-217-01	KNOB, SELECTION (SLV-625VP)	
55	3-942-844-21	ESCUTCHEON	
56	3-736-055-01	SCREW (3X8), TAPPING	
57	3-741-948-01	SCREW (3), SPECIAL (+) TAPPING	
* 58	3-946-438-01	LABEL, MODEL NUMBER (SLV-625)	
* 58	3-946-439-01	LABEL, MODEL NUMBER (SLV-625VP)	
* 58	3-946-440-01	LABEL, MODEL NUMBER (SLV-625NC)	
* 58	3-946-441-01	LABEL, MODEL NUMBER (SLV-625NP)	
* 58	3-946-442-01	LABEL, MODEL NUMBER (SLV-625UB)	
⚠ 59	1-413-635-11	POWER BLOCK (SLV-625UB)	
⚠ 59	1-413-636-11	POWER BLOCK (SLV-625VP)	
⚠ 59	1-413-637-11	POWER BLOCK (SLV-625/NC/NP)	
60	3-741-992-01	STOPPER, UPPER CASE	
61	3-944-396-01	PLATE (BS), GROUND, MF	
S901	1-572-662-11	SWITCH, ROTARY	

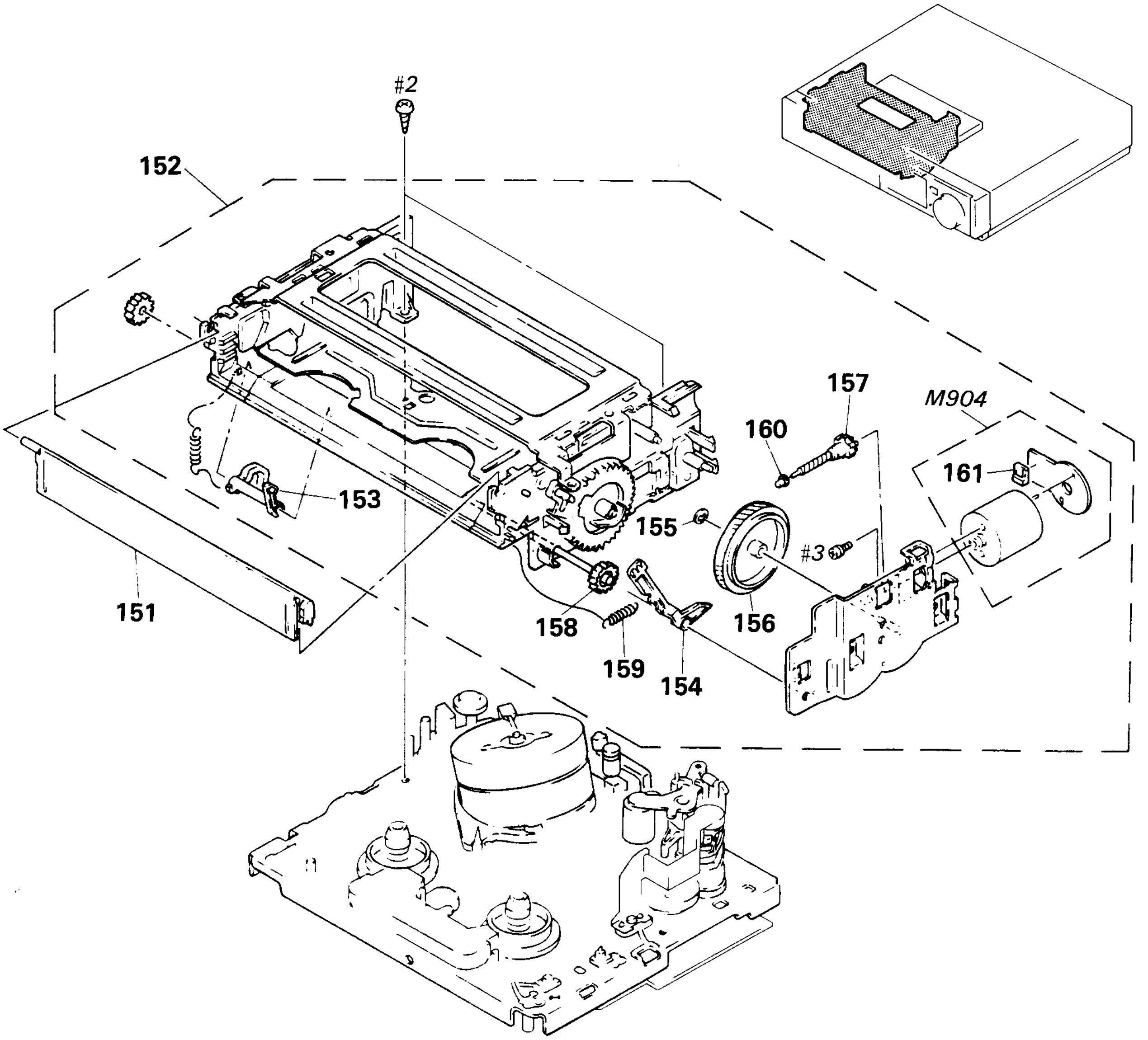
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

5-3. MAIN BOARD ASSEMBLY


102
105
101
#2
#2
103
#1
SLV-625NP
107
#1
#1
#2
106
#1
#2
112
not supplied
not supplied
108
SLV-625NP
111
109
115
114
SLV-625NP
not supplied
#2
110
104
113
not supplied
#2
#2
101

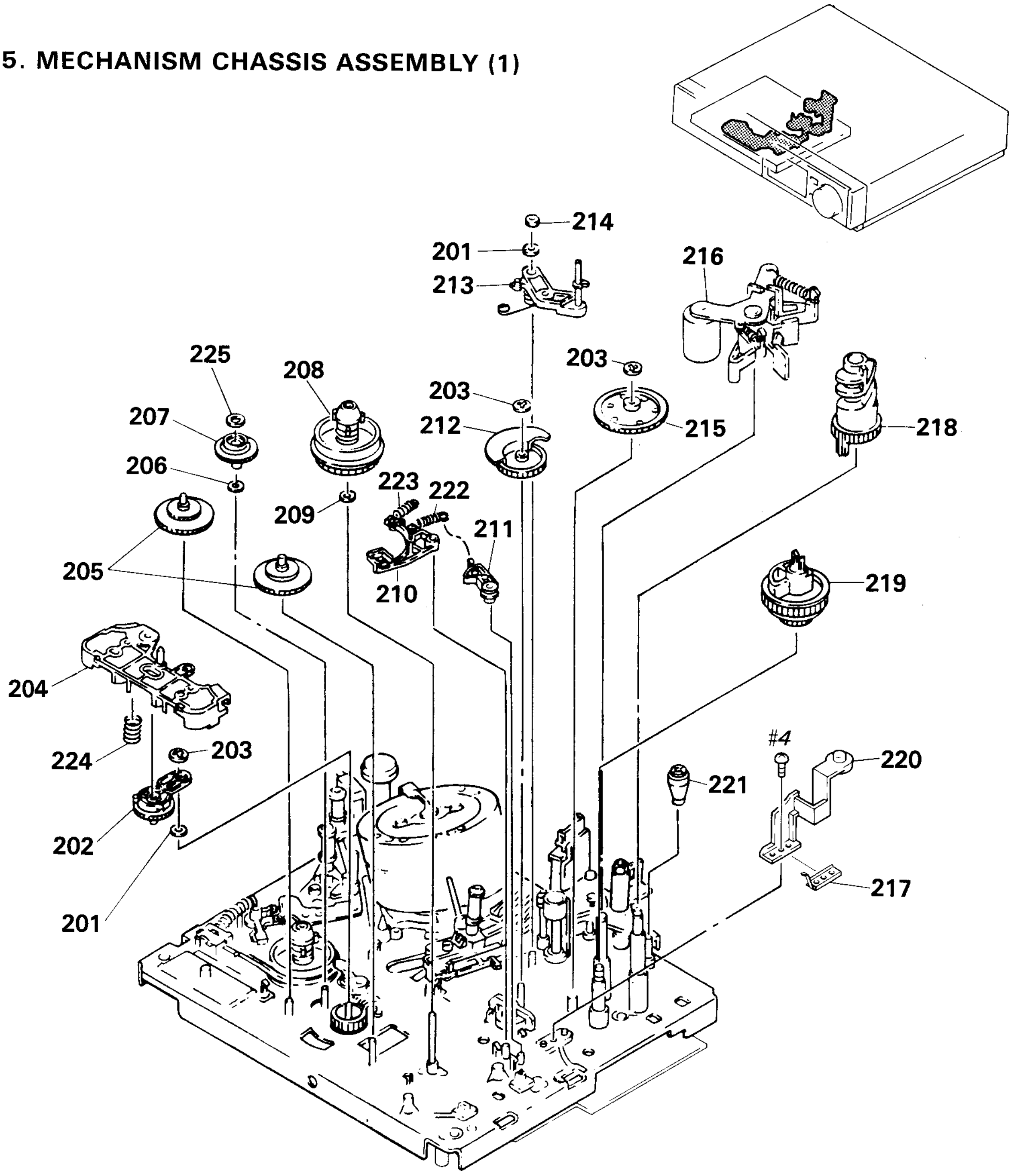
Ref. No.	Part No.	Description	Remark
101	3-682-057-11	SPACER (SMALL)	
* 102	A-6727-408-A	YC-122 BOARD, COMPLETE (SLV-625/NC/NP/UB)	
* 102	A-6727-455-A	YC-122 BOARD, COMPLETE (SLV-625VP)	
103	1-590-980-11	CABLE, FLEXIBLE (FYM-1)	
* 104	3-682-419-31	HOLDER, P.C.B	
* 105	3-746-013-01	HOLDER (Y), PC BOARD	
* 106	3-741-963-01	BRACKET, RF	
* 107	3-946-836-21	PLATE, ORNAMENTAL, JACK (SLV-625/NC/UB/VP)	
* 107	3-946-836-31	PLATE, ORNAMENTAL, JACK (SLV-625NP)	
108	1-590-981-11	CABLE, FLEXIBLE (FCP-2) (SLV-625NP)	
109	A-6755-412-A	CP-55 BOARD, COMPLETE (SLV-625NP)	
* 110	A-6756-359-A	HF-22 BOARD, COMPLETE	
111	A-6755-413-A	CP-54 BOARD, COMPLETE (SLV-625NP)	
112	3-736-704-01	HINGE, PC BOARD	
* 113	A-6756-351-A	MA-138 BOARD, COMPLETE (SLV-625NC)	
* 113	A-6756-352-A	MA-138 BOARD, COMPLETE (SLV-625NP)	
* 113	A-6756-354-A	MA-138 BOARD, COMPLETE (SLV-625VP)	
* 113	A-6756-356-A	MA-138 BOARD, COMPLETE (SLV-625)	
* 113	A-6756-357-A	MA-138 BOARD, COMPLETE (SLV-625UB)	
* 114	A-6712-489-A	SS-147 BOARD, COMPLETE (SLV-625VP)	
* 114	A-6712-490-A	SS-147 BOARD, COMPLETE (SLV-625/NC/NP/UB)	
* 115	A-6756-353-A	OS-13 BOARD, COMPLETE (SLV-625VP)	
* 115	A-6756-355-A	OS-13 BOARD, COMPLETE (SLV-625/NC/NP/UB)	

5-4. FL CASSETTE COMPARTMENT ASSEMBLY



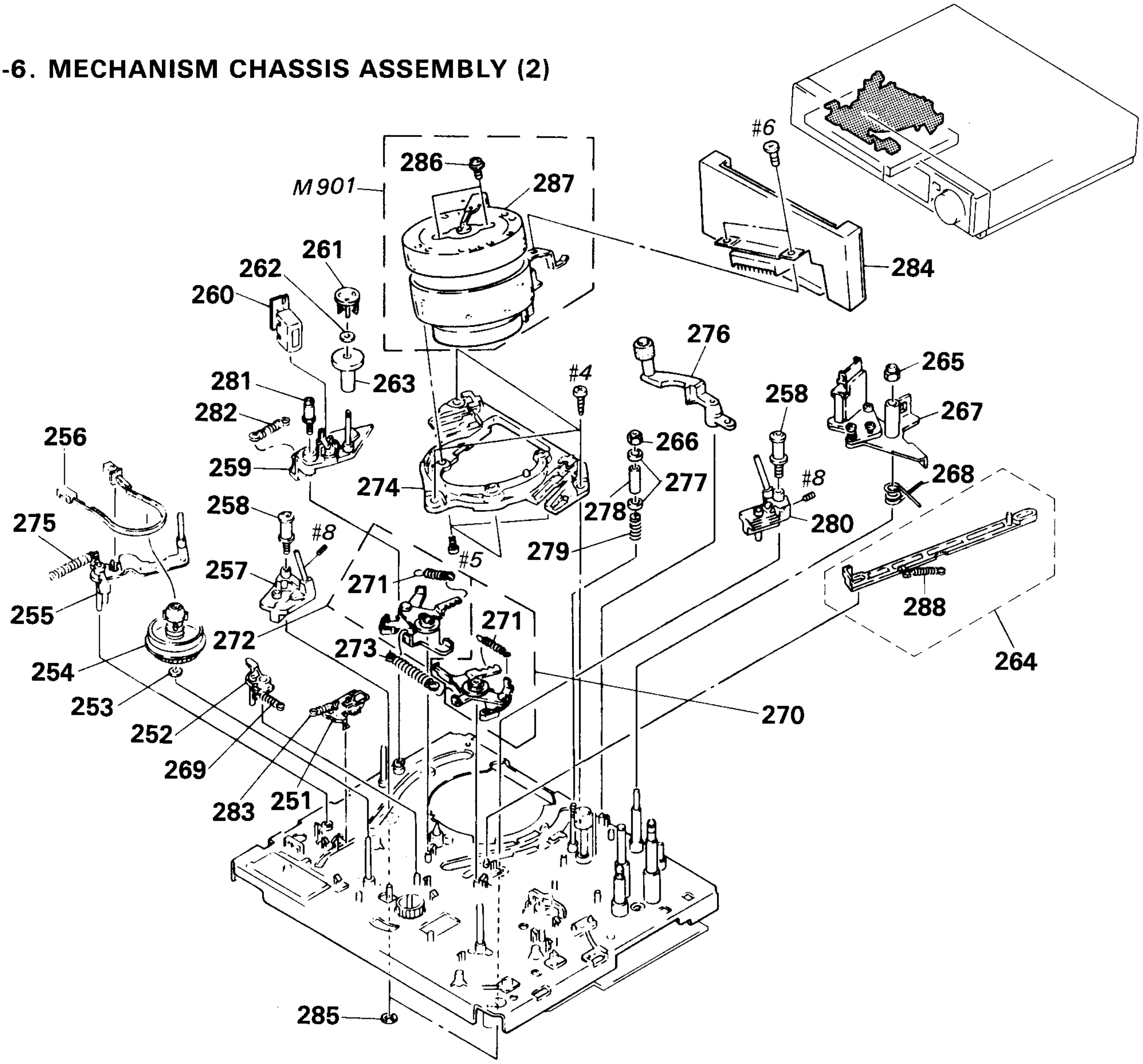
Ref. No.	Part No.	Description	Remark
151	X-3940-866-1	DOOR ASSY, FL	
152	A-6751-453-A	FL BLOCK ASSY	
153	3-736-163-01	LEVER, ERASING PROTECTION	
154	3-736-167-01	ARM, DOOR SWITCHING	
155	3-696-510-01	WASHER (3), STOPPER	
156	3-736-164-01	WHEEL (FL), WORM	
157	3-736-100-01	GEAR (FL), WORM	
158	X-3727-775-2	GEAR (RIGHT) ASSY, MIDWAY	
159	3-738-285-01	SPRING, TENSION	
160	3-716-144-02	RETAINER, WORM	
161	1-506-482-11	CONNECTOR 3P, MALE	
M904	X-3727-784-1	MOTOR ASSY (LOADING)	

5-5. MECHANISM CHASSIS ASSEMBLY (1)


214
201
213
216
225
208
203
203
207
212
215
218
206
223
222
209
211
205
210
219
204
224
203
#4
220
221
202
217
201

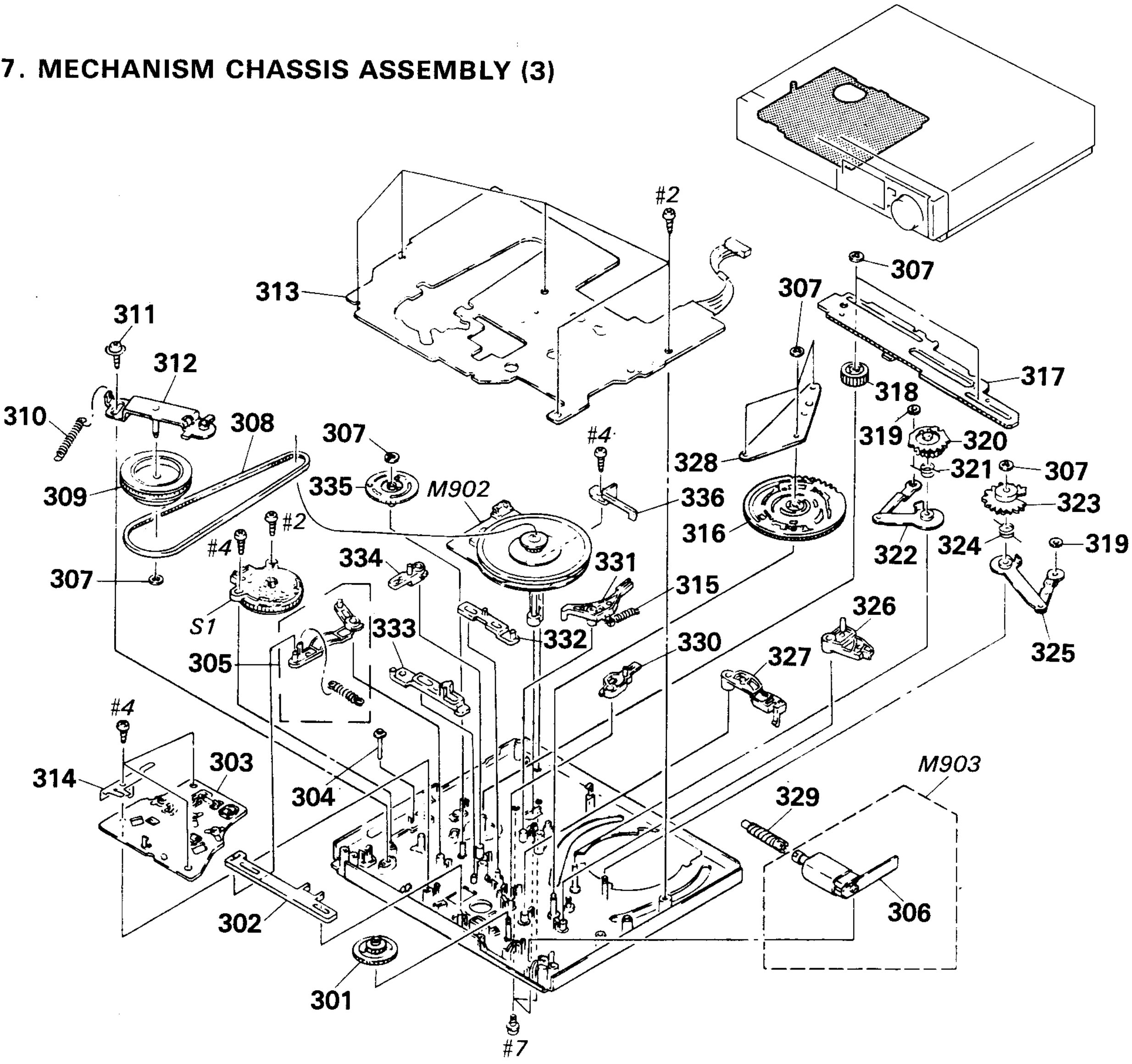
Ref. No.	Part No.	Description	Remark
201	3-701-438-11	WASHER, 2.5	
202	X-3727-776-1	ARM ASSY, PENDULUM	
203	3-669-595-00	WASHER (2), STOPPER	
204	3-736-172-02	RELEASE, LOCK, REEL	
205	X-3727-795-1	GEAR ASSY, RELAY	
206	3-736-074-01	RETAINER (SMALL), THRUST	
207	3-736-037-01	GEAR, REW	
208	X-3727-798-1	TABLE ASSY, REEL	
209	3-738-212-21	RETAINER, THRUST, REEL TABLE	
210	X-3733-335-1	BRAKE ASSY (AT), T SOFT	
211	3-736-105-01	ARM, REV BRAKE	
212	3-736-143-01	GEAR, RVS CAM	
213	X-3729-911-1	ARM ASSY, RVS	
214	3-736-740-01	NUT (M2X0.25), NYLON	
215	3-736-116-01	GEAR, COMMUNICATION	
216	X-3727-770-1	PINCH ROLLER BLOCK ASSY	
217	3-942-829-01	SPRING (2) (ATOM), GROUND, FL	
218	3-736-136-01	CAM, ELEVATOR	
219	3-943-700-01	GEAR (LO), PRESS CAM	
220	3-942-828-01	OPENNER, LID	
221	3-738-250-01	SCREW, AC ADJUSTMENT	
222	3-736-025-01	SPRING (REV BRAKE), TENSION	
223	3-736-024-01	SPRING, TENSION	
224	3-736-020-11	SPRING, COMPRESSION	
225	3-736-069-01	RETAINER, SPRING	

5-6. MECHANISM CHASSIS ASSEMBLY (2)


286
M901
287
#6
261
262
260
284
276
265
281
263
#4
258
267
282
266
256
259
274
277
268
#8
258
278
275
#8
280
279
#5
257
271
288
271
255
272
273
264
254
270
253
252
269
251
283
285

Ref. No.	Part No.	Description	Remark
251	A-6759-483-A	TAKE-UP BLOCK ASSY (AT), S	
252	3-736-075-01	BRAKE, S SOFT	
253	3-738-212-21	RETAINER, THRUST, REEL TABLE	
254	X-3729-935-3	TABLE ASSY (2), S REEL	
255	3-736-151-11	ARM (POM), TENSION REGULATOR	
256	X-3727-797-1	BAND ASSY, TENSION REGULATOR	
257	X-3727-786-1	SHUTTLE (LEFT) ASSY	
258	X-3733-301-1	ROLLER ASSY, GUIDE	
259	X-3727-767-1	BASE ASSY, STABILIZER	
260	1-543-647-11	HEAD, FE	
261	3-736-082-01	RETAINER, TS THRUST	
262	3-741-925-01	RING, RETAINING	
263	X-3727-771-1	STABLILIZER ASSY, TAPE	
264	X-3743-517-1	LEVER (S), RELEASE, C ROLLER	
265	3-942-867-01	NUT, AC HEIGHT ADJUSTMENT	
266	3-942-866-01	NUT (M3) (3X0.5), NYLON	
267	A-6761-129-A	HEAD BLOCK ASSY, ACE	
268	3-944-833-01	SPRING, TORSION	
269	3-736-047-01	SPRING (S SOFT), TENSION	
270	X-3729-926-1	BRAKE ASSY (2), T	
271	3-738-220-01	SPRING (MAIN BRAKE 2), TENSION	
272	X-3733-336-2	BRAKE ASSY (2) (AT), S	
273	3-738-221-01	SPRING (MAIN BRAKE 1), TENSION	
274	X-3727-791-2	BASE ASSY, DRUM	
275	3-733-389-11	SPRING, TENSION	
276	A-6747-267-A	ARM BLOCK ASSY (S), C ROLLER	
277	3-944-033-01	FLANGE, 7 GUIDE	
278	3-736-730-01	SLEEVE, #7 GUIDE	
279	3-749-099-01	SPRING (#7 GUIDE), COMPRESSION	
280	X-3727-787-1	SHUTTLE (RIGHT) ASSY	
281	X-3727-788-1	ROLLER ASSY, GUIDE, #2	
282	3-736-745-01	SPRING	
283	3-738-284-01	SPRING, TENSION	
284	A-6727-353-A	RP-63 BOARD, COMPLETE	
285	3-736-073-01	SLIDER, POLYETHYLENE	
286	2-643-205-01	SCREW (PSW) 3X8	
287	1-550-694-11	DRUM ASSY, ROTARY UPPER (DZR-43-R)	
288	3-736-735-03	SPRING, TENSION	
M901	1-550-693-11	DRUM ASSY (DZH-43A-R)	

5-7. MECHANISM CHASSIS ASSEMBLY (3)


#2
313
311
312
310
308
307
309
335
M902
#4
336
328
316
307
307
317
318
319
320
321
307
323
322
324
319
325
307
#4
#2
S1
334
331
315
326
333
332
330
327
305
#4
314
303
304
M903
329
306
302
301
#7

Ref. No.	Part No.	Description	Remark
301	3-736-015-01	WHEEL (CAM), WORM	
302	3-736-158-01	PLATE, SLIDE, PENDULUM	
303	A-6739-084-A	CHASSIS BLOCK ASSY, SUB	
304	3-736-091-01	PIN, SWITCH	
305	X-3729-924-1	ARM, PENDULUM FUNCTION	
* 306	1-633-460-11	PC BOAD, CA-41	
307	3-669-595-00	WASHER (2), STOPPER	
308	3-736-013-01	BELT, TIMING	
309	X-3727-782-1	PULLEY ASSY	
310	3-736-089-01	SPRING, TENSION	
311	3-733-386-01	SCREW (3X8), WASHER	
312	X-3727-761-1	ARM ASSY, ADJUSTMENT	
313	A-6754-352-A	MD-55 BOARD, COMPLETE	
314	3-741-950-01	SPRING (AT), LEAF, SC GROUND	
315	3-738-237-01	SPRING (CAP BRAKE), TENSION	
316	3-736-176-01	GEAR, CAM	
317	3-736-177-01	PLATE, SLIDE, MODE	
318	3-733-394-01	GEAR, RVS RELAY	
319	3-736-073-01	SLIDER, POLYETHYLENE	
320	3-736-148-01	GEAR (RIGHT), THREADING	
321	3-736-092-01	SPRING (RIGHT), TORSION	
322	X-3727-777-1	ARM (RIGHT) ASSY, THREADING	
323	3-736-147-01	GEAR (LEFT), THREADING	
324	3-736-040-01	SPRING (LEFT), TORSION	
325	X-3727-778-1	ARM (LEFT) ASSY, THREADING	
326	3-736-142-01	ARM, TENSION REGULATOR FUNCTION	
327	3-736-140-01	ARM, S TAKE-UP	
328	3-733-396-01	HOLDER, CAM GEAR	
329	3-733-395-01	GEAR (CAM), WORM	
330	3-733-397-01	ARM, BRAKE FUNCTION	
331	X-3733-338-1	BRAKE ASSY (AT), CAP	
332	3-733-398-01	PLATE, SLIDE, BRAKE	
333	3-736-103-01	PLATE, SLIDE, LIMITER	
334	3-736-016-01	ARM, LIMITER FUNCTION	
335	3-736-170-01	GEAR, RKB CAM	
336	3-736-744-01	RETAINER, ROTOR	
M902	8-835-394-11	MOTOR, DC U-26F (CAPSTAN)	
M903	X-3733-302-1	MOTOR ASSY, CAM	
S1	1-692-062-11	SWITCH, ROTARY	

SECTION 6
ELECTRICAL PARTS LIST

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- RESISTORS
  All resistors are in ohms
  METAL:Metal-film resistor
  METAL OXIDE:Metal Oxide-film resistor
  F:nonflammable
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u:μ , for example:
  uA...: μA..., uPA...: μPA...,
  uPB...: μPB..., uPC...: μPC...,
  uPD...: μPB...
- CAPACITORS
  uF: μF
- COILS
  uH: μH

When indication parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description				Remark
*	1-633-460-11	CA-41 BOARD (Ref. No. 1,000 Series)				
		***********				
		< CONNECTOR >				
CN001	1-506-482-11	PIN, CONNECTOR 3P				
***						
*	A-6755-413-A	CP-54 BOARD, COMPLETE (SLV-625NP)				
		*********************				
		(Ref. No. 5,000 Series)				
	3-831-441-XX	CUSHION				
		< CAPACITOR >				
C101	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C102	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C103	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C104	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C105	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	
C106	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	
C107	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	
C108	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	
C109	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	
C110	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	
C111	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	
C112	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	
C113	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C114	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C115	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C116	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C117	1-163-031-11	CERAMIC CHIP	0.01uF		50V	
		< CONNECTOR >				
CN101	1-563-623-11	CONNECTOR, FLEXIBLE 20P				
CNJ103	1-561-534-41	SOCKET 21P (EURO AV)				
CNJ104	1-561-534-41	SOCKET 21P (CANAL PLUS)				
		< DIODE >				
D101	8-719-108-12	DIODE	RD9.1E-W			
D102	8-719-109-97	DIODE	RD6.8ES-B2			
D103	8-719-109-97	DIODE	RD6.8ES-B2			
D104	8-719-109-97	DIODE	RD6.8ES-B2			
D105	8-719-109-97	DIODE	RD6.8ES-B2			
D106	8-719-921-86	DIODE	MTZJ-13			
D107	8-719-109-97	DIODE	RD6.8ES-B2			
D108	8-719-109-97	DIODE	RD6.8ES-B2			
D109	8-719-109-97	DIODE	RD6.8ES-B2			
D110	8-719-921-40	DIODE	MTZJ-6.2B			
D111	8-719-921-86	DIODE	MTZJ-13			
		< JUMPER RESISTOR >				
JR101	1-216-295-00	METAL CHIP	0	5%	1/10W	
JR102	1-216-295-00	METAL CHIP	0	5%	1/10W	
JR103	1-216-295-00	METAL CHIP	0	5%	1/10W	
JR104	1-216-295-00	METAL CHIP	0	5%	1/10W	
JR105	1-216-295-00	METAL CHIP	0	5%	1/10W	
		< COIL >				
L101	1-410-336-11	INDUCTOR	220uH			
L102	1-410-336-11	INDUCTOR	220uH			
L103	1-410-336-11	INDUCTOR	220uH			
L104	1-410-336-11	INDUCTOR	220uH			
L105	1-410-336-11	INDUCTOR	220uH			
L106	1-410-336-11	INDUCTOR	220uH			
L108	1-410-336-11	INDUCTOR	220uH			

< TRANSISTOR >

Ref. No.	Part No.	Description	Remark
Q101	8-729-216-22	TRANSISTOR 2SA1162-G	

< RESISTOR >

Ref. No.	Part No.	Description	Remark
R111	1-216-041-00	METAL CHIP 470 5% 1/10W	
R112	1-216-041-00	METAL CHIP 470 5% 1/10W	
R113	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R114	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R115	1-216-021-00	METAL CHIP 68 5% 1/10W	
R116	1-216-022-00	METAL CHIP 75 5% 1/10W	
R117	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R118	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R119	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R120	1-216-022-00	METAL CHIP 75 5% 1/10W	
R121	1-216-041-00	METAL CHIP 470 5% 1/10W	
R122	1-216-041-00	METAL CHIP 470 5% 1/10W	
R123	1-216-021-00	METAL CHIP 68 5% 1/10W	
R124	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	

****

* A-6755-412-A CP-55 BOARD, COMPLETE (SLV-625NP)

****

(Ref. No. 5,000 Series)

< CAPACITOR >

Ref. No.	Part No.	Description	Remark
C001	1-163-038-00	CERAMIC CHIP 0.1uF 25V	
C002	1-124-589-11	ELECT 47uF 20% 16V	
C003	1-124-234-00	ELECT 22uF 20% 16V	
C004	1-124-234-00	ELECT 22uF 20% 16V	
C005	1-124-589-11	ELECT 47uF 20% 16V	
C006	1-163-038-00	CERAMIC CHIP 0.1uF 25V	
C007	1-126-301-11	ELECT 1uF 20% 50V	
C008	1-124-261-00	ELECT 10uF 20% 50V	
C009	1-124-234-00	ELECT 22uF 20% 16V	
C010	1-124-234-00	ELECT 22uF 20% 16V	
C011	1-124-234-00	ELECT 22uF 20% 16V	
C012	1-124-234-00	ELECT 22uF 20% 16V	
C013	1-126-301-11	ELECT 1uF 20% 50V	
C014	1-126-301-11	ELECT 1uF 20% 50V	
C015	1-124-234-00	ELECT 22uF 20% 16V	
C016	1-124-234-00	ELECT 22uF 20% 16V	
C017	1-124-234-00	ELECT 22uF 20% 16V	
C018	1-124-234-00	ELECT 22uF 20% 16V	
C019	1-124-234-00	ELECT 22uF 20% 16V	
C020	1-124-234-00	ELECT 22uF 20% 16V	
C021	1-124-234-00	ELECT 22uF 20% 16V	
C022	1-124-234-00	ELECT 22uF 20% 16V	
C023	1-126-157-11	ELECT 10uF 20% 16V	
C024	1-124-471-00	ELECT 1000uF 20% 6.3V	

Ref. No.	Part No.	Description	Remark
C024	1-124-471-00	ELECT 1000uF 20% 6.3V	

< CONNECTOR >

Ref. No.	Part No.	Description	Remark
CN001	1-580-848-11	SOCKET, CONNECTOR (PC BOARD) 20P	
* CN002	1-569-385-11	SOCKET, CONNECTOR (PC BOARD) 8P	
CN003	1-563-623-11	CONNECTOR, FLEXIBLE 20P	

< DIODE >

Ref. No.	Part No.	Description	Remark
D001	8-719-400-18	DIODE MA152WK	
D002	8-719-800-76	DIODE 1SS226	
D003	8-719-921-86	DIODE MTZJ-13	
D004	8-719-921-86	DIODE MTZJ-13	
D005	8-719-921-42	DIODE MTZJ-5.1A	

< IC >

Ref. No.	Part No.	Description	Remark
IC001	8-759-932-67	IC BU4053BF	
IC002	8-759-932-67	IC BU4053BF	
IC003	8-759-909-71	IC BA4558F	
IC004	8-759-909-71	IC BA4558F	
IC005	8-759-909-71	IC BA4558F	
IC006	8-759-504-94	IC BA7630S	

< JUMPER RESISTOR >

Ref. No.	Part No.	Description	Remark
JR001	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR002	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR005	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR006	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR007	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR008	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR010	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR012	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR014	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR015	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR018	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR019	1-216-296-00	METAL CHIP 0 5% 1/8W	
JR022	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR030	1-216-296-00	METAL CHIP 0 5% 1/8W	
JR032	1-216-296-00	METAL CHIP 0 5% 1/8W	
JR033	1-216-296-00	METAL CHIP 0 5% 1/8W	

< COIL >

Ref. No.	Part No.	Description	Remark
L001	1-408-409-00	INDUCTOR 10uH	

< TRANSISTOR >

Ref. No.	Part No.	Description	Remark
Q001	8-729-901-06	TRANSISTOR DTA144EK	
Q002	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q003	8-729-216-22	TRANSISTOR 2SA1162-G	
Q004	8-729-216-22	TRANSISTOR 2SA1162-G	

CP-55 HF-22

< RESISTOR >

Ref. No.	Part No.	Description			Remark
R001	1-216-022-00	METAL CHIP	75	5%	1/10W
R002	1-216-073-00	METAL CHIP	10K	5%	1/10W
R003	1-216-049-00	METAL CHIP	1K	5%	1/10W
R004	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R005	1-216-049-00	METAL CHIP	1K	5%	1/10W
R006	1-216-023-00	METAL CHIP	82	5%	1/10W
R007	1-216-023-00	METAL CHIP	82	5%	1/10W
R008	1-216-097-00	METAL CHIP	100K	5%	1/10W
R009	1-216-097-00	METAL CHIP	100K	5%	1/10W
R010	1-216-097-00	METAL CHIP	100K	5%	1/10W
R011	1-216-097-00	METAL CHIP	100K	5%	1/10W
R013	1-216-097-00	METAL CHIP	100K	5%	1/10W
R014	1-216-097-00	METAL CHIP	100K	5%	1/10W
R015	1-216-097-00	METAL CHIP	100K	5%	1/10W
R016	1-216-097-00	METAL CHIP	100K	5%	1/10W
R017	1-216-073-00	METAL CHIP	10K	5%	1/10W
R018	1-216-073-00	METAL CHIP	10K	5%	1/10W
R019	1-216-081-00	METAL CHIP	22K	5%	1/10W
R020	1-216-081-00	METAL CHIP	22K	5%	1/10W
R021	1-216-081-00	METAL CHIP	22K	5%	1/10W
R023	1-216-295-00	METAL CHIP	0	5%	1/10W
R025	1-216-295-00	METAL CHIP	0	5%	1/10W
R026	1-216-073-00	METAL CHIP	10K	5%	1/10W

****

* A-6756-359-A HF-22 BOARD, COMPLETE

****

(Ref. No. 2,000 Series)

3-738-216-01 COVER, VOLUME

< CAPACITOR >

Ref. No.	Part No.	Description			Remark
C201	1-126-101-11	ELECT	100uF	20%	16V
C202	1-126-101-11	ELECT	100uF	20%	16V
C204	1-126-101-11	ELECT	100uF	20%	16V
C205	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C206	1-124-925-11	ELECT	2.2uF	20%	100V
C207	1-124-477-11	ELECT	47uF	20%	25V
C208	1-126-163-11	ELECT	4.7uF	20%	50V
C209	1-126-096-11	ELECT	10uF	20%	35V
C210	1-124-477-11	ELECT	47uF	20%	25V
C211	1-124-925-11	ELECT	2.2uF	20%	100V
C212	1-124-477-11	ELECT	47uF	20%	25V
C213	1-124-477-11	ELECT	47uF	20%	25V
C214	1-124-477-11	ELECT	47uF	20%	25V
C215	1-126-096-11	ELECT	10uF	20%	35V
C216	1-126-163-11	ELECT	4.7uF	20%	50V
C217	1-124-925-11	ELECT	2.2uF	20%	100V
C218	1-124-925-11	ELECT	2.2uF	20%	100V
C219	1-126-157-11	ELECT	10uF	20%	16V
C220	1-126-157-11	ELECT	10uF	20%	16V
C221	1-130-483-00	MYLAR	0.01uF	5%	50V
C222	1-126-163-11	ELECT	4.7uF	20%	50V
C223	1-124-120-11	ELECT	220uF	20%	25V
C224	1-124-925-11	ELECT	2.2uF	20%	100V
C225	1-130-487-00	MYLAR	0.022uF	5%	50V
C226	1-126-096-11	ELECT	10uF	20%	35V
C227	1-124-234-00	ELECT	22uF	20%	16V
C228	1-130-473-00	MYLAR	0.0015uF	5%	50V
C229	1-130-475-00	MYLAR	0.0022uF	5%	50V
C230	1-130-475-00	MYLAR	0.0022uF	5%	50V
C231	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C232	1-126-101-11	ELECT	100uF	20%	16V
C233	1-130-483-00	MYLAR	0.01uF	5%	50V
C234	1-124-903-11	ELECT	1uF	20%	50V
C235	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C236	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C237	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C238	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C239	1-130-475-00	MYLAR	0.0022uF	5%	50V
C240	1-130-475-00	MYLAR	0.0022uF	5%	50V
C241	1-130-473-00	MYLAR	0.0015uF	5%	50V
C242	1-124-234-00	ELECT	22uF	20%	16V
C244	1-126-096-11	ELECT	10uF	20%	35V
C245	1-130-487-00	MYLAR	0.022uF	5%	50V
C246	1-124-925-11	ELECT	2.2uF	20%	100V
C247	1-124-120-11	ELECT	220uF	20%	25V
C248	1-126-163-11	ELECT	4.7uF	20%	50V
C249	1-130-483-00	MYLAR	0.01uF	5%	50V
C250	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C251	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C299	1-163-089-00	CERAMIC CHIP	6PF		50V

< CONNECTOR >

Ref. No.	Part No.	Description	Remark
CN201	1-580-848-11	SOCKET, CONNECTOR (PC BOARD)	20P
CN202	1-580-855-11	SOCKET, CONNECTOR (PC BOARD)	14P

< DIODE >

Ref. No.	Part No.	Description	
D201	8-719-104-34	DIODE	1S2836

< IC >

Ref. No.	Part No.	Description	
IC201	8-759-057-63	IC	AN3937NFBP
IC202	8-759-946-44	IC	TK15120M
IC203	8-759-924-46	IC	BA4560F
IC204	8-759-946-44	IC	TK15120M
IC205	8-759-938-15	IC	BA178M05

When indication parts by reference number, please include the board name.

< JUMPER RESISTOR >

Ref. No.	Part No.	Description			Remark
JR201	1-216-295-00	METAL CHIP	0	5%	1/10W
JR203	1-216-296-00	METAL CHIP	0	5%	1/8W
JR205	1-216-295-00	METAL CHIP	0	5%	1/10W
JR206	1-216-295-00	METAL CHIP	0	5%	1/10W
JR207	1-216-296-00	METAL CHIP	0	5%	1/8W
JR208	1-216-295-00	METAL CHIP	0	5%	1/10W
JR209	1-216-296-00	METAL CHIP	0	5%	1/8W
JR211	1-216-296-00	METAL CHIP	0	5%	1/8W
JR212	1-216-296-00	METAL CHIP	0	5%	1/8W
JR213	1-216-296-00	METAL CHIP	0	5%	1/8W
JR214	1-216-295-00	METAL CHIP	0	5%	1/10W
JR215	1-216-296-00	METAL CHIP	0	5%	1/8W
JR217	1-216-295-00	METAL CHIP	0	5%	1/10W
JR218	1-216-296-00	METAL CHIP	0	5%	1/8W
JR219	1-216-296-00	METAL CHIP	0	5%	1/8W
JR221	1-216-296-00	METAL CHIP	0	5%	1/8W
JR222	1-216-296-00	METAL CHIP	0	5%	1/8W
JR224	1-216-296-00	METAL CHIP	0	5%	1/8W
JR225	1-216-296-00	METAL CHIP	0	5%	1/8W

< RESISTOR >

Ref. No.	Part No.	Description			Remark
R201	1-249-417-11	CARBON	1K	5%	1/4W
R202	1-249-417-11	CARBON	1K	5%	1/4W
R203	1-249-408-11	CARBON	180	5%	1/4W
R205	1-249-408-11	CARBON	180	5%	1/4W
R206	1-249-414-11	CARBON	560	5%	1/4W
R207	1-249-441-11	CARBON	100K	5%	1/4W
R208	1-249-437-11	CARBON	47K	5%	1/4W
R209	1-247-891-00	CARBON	330K	5%	1/4W
R210	1-249-414-11	CARBON	560	5%	1/4W
R211	1-249-441-11	CARBON	100K	5%	1/4W
R212	1-216-049-00	METAL CHIP	1K	5%	1/10W
R213	1-216-113-00	METAL CHIP	470K	5%	1/10W
R214	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R215	1-249-429-11	CARBON	10K	5%	1/4W
R216	1-249-417-11	CARBON	1K	5%	1/4W
R217	1-216-097-00	METAL CHIP	100K	5%	1/10W
R218	1-216-679-11	METAL CHIP	15K	0.5%	1/10W
R220	1-216-208-00	METAL GLAZE	2.7K	5%	1/8W
R221	1-216-049-00	METAL CHIP	1K	5%	1/10W
R222	1-216-192-00	METAL CHIP	560	5%	1/8W
R223	1-216-053-00	METAL CHIP	2.7K	5%	1/10W
R224	1-216-083-00	METAL CHIP	27K	5%	1/10W
R225	1-216-675-11	METAL CHIP	10K	0.5%	1/10W
R226	1-249-429-11	CARBON	10K	5%	1/4W
R227	1-249-417-11	CARBON	1K	5%	1/4W

< VARIABLE RESISTOR >

Ref. No.	Part No.	Description	Remark
RV201	1-241-080-11	RES, ADJ, CARBON 10K	
RV202	1-230-523-11	RES, ADJ, METAL 10K	
RV204	1-241-080-11	RES, ADJ, CARBON 10K	
RV205	1-230-522-11	RES, ADJ, METAL 4.7K	
RV206	1-241-080-11	RES, ADJ, CARBON 10K	

`**********************************************************`

*	A-6756-356-A	MA-138 BOARD, COMPLETE (SLV-625)
		**********************
*	A-6756-351-A	MA-138 BOARD, COMPLETE (SLV-625NC)
		**********************
*	A-6756-352-A	MA-138 BOARD, COMPLETE (SLV625NP)
		**********************
*	A-6756-357-A	MA-138 BOARD, COMPLETE (SLV-625UB)
		**********************
*	A-6756-354-A	MA-138 BOARD, COMPLETE (SLV-625VP)
		**********************

(Ref. No. 3,000 Series)

	1-555-110-00	CABLE, PIN (SLV-625/NP/UB/VP)
*	3-716-605-01	SPACER, RUBBER (SLV-625/NC/UB/VP)
	3-831-441-XX	CUSHION (SLV-625/NC/UB/VP)

< CAPACITOR >

Ref. No.	Part No.	Description			Remark
C101	1-164-159-11	CERAMIC	0.1uF		50V
C102	1-161-379-00	CERAMIC	0.01uF	20%	25V
C103	1-164-075-11	CERAMIC	150PF	10%	50V
C104	1-161-772-11	CERAMIC	0.1uF	10%	25V
C151	1-124-472-11	ELECT	470uF	20%	10V
C152	1-161-379-00	CERAMIC	0.01uF	20%	25V
C153	1-102-953-00	CERAMIC	18PF	5%	50V
C154	1-102-953-00	CERAMIC	18PF	5%	50V
C155	1-161-379-00	CERAMIC	0.01uF	20%	25V
C156	1-161-379-00	CERAMIC	0.01uF	20%	25V
C157	1-161-379-00	CERAMIC	0.01uF	20%	25V
C159	1-126-154-11	ELECT	47uF	20%	6.3V
C160	1-161-379-00	CERAMIC	0.01uF	20%	25V
C161	1-162-211-31	CERAMIC	33PF	5%	50V
C162	1-162-211-31	CERAMIC	33PF	5%	50V
C164	1-162-839-11	CERAMIC	0.01uF	10%	16V
C220	1-124-925-11	ELECT	2.2uF	20%	100V
C221	1-161-772-11	CERAMIC	0.1uF	10%	25V
C222	1-102-125-00	CERAMIC	4700PF	10%	50V
C223	1-102-074-00	CERAMIC	0.001uF	10%	50V
C224	1-162-847-11	CERAMIC	0.047uF	20%	16V
C225	1-162-849-11	CERAMIC	0.068uF	20%	16V
C226	1-126-154-11	ELECT	47uF	20%	6.3V
C227	1-161-379-00	CERAMIC	0.01uF	20%	25V
C228	1-126-101-11	ELECT	100uF	20%	16V
C229	1-126-101-11	ELECT	100uF	20%	16V

When indication parts by reference number, please include the board name.

MA-138

Ref. No.	Part No.	Description	Remark
C230	1-124-443-00	ELECT 100uF 20% 10V	
C231	1-126-233-11	ELECT 22uF 20% 50V	
C232	1-124-927-11	ELECT 4.7uF 20% 100V	
C233	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C501	1-124-903-11	ELECT 1uF 20% 50V	(SLV-625NC/NP/UB)
C502	1-124-903-11	ELECT 1uF 20% 50V	(SLV-625/NC/NP/VP)
C503	1-124-907-11	ELECT 10uF 20% 50V	
C504	1-124-907-11	ELECT 10uF 20% 50V	(SLV-625UB)
C521	1-124-907-11	ELECT 10uF 20% 50V	
C522	1-136-159-00	MYLAR 0.033uF 10% 50V	(SLV-625/NC/NP/VP)
C531	1-124-927-11	ELECT 4.7uF 20% 100V	
C532	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C533	1-126-233-11	ELECT 22uF 20% 50V	
C534	1-124-126-00	ELECT 47uF 20% 10V	
C535	1-126-103-11	ELECT 470uF 20% 16V	
C536	1-126-233-11	ELECT 22uF 20% 50V	
C537	1-124-126-00	ELECT 47uF 20% 10V	(SLV-625/VP)
C538	1-124-477-11	ELECT 47uF 20% 25V	
C539	1-124-477-11	ELECT 47uF 20% 25V	(SLV-625/NC/NP/VP)
C540	1-136-153-00	FILM 0.01uF 5% 50V	(SLV-625/NC/NP/VP)
C541	1-162-294-31	CERAMIC 0.001uF 10% 50V	(SLV-625VP)
C542	1-162-294-31	CERAMIC 0.001uF 10% 50V	(SLV-625VP)
C543	1-162-294-31	CERAMIC 0.001uF 10% 50V	(SLV-625VP)
C544	1-162-294-31	CERAMIC 0.001uF 10% 50V	(SLV-625VP)
C545	1-162-294-31	CERAMIC 0.001uF 10% 50V	(SLV-625VP)
C546	1-124-477-11	ELECT 47uF 20% 25V	(SLV-625NC/NP/UB)
C547	1-124-126-00	ELECT 47uF 20% 10V	(SLV-625NC/NP/UB)
C548	1-164-159-11	CERAMIC 0.1uF 50V	(SLV-625NC/NP/UB)
C551	1-124-903-11	ELECT 1uF 20% 50V	(SLV-625NC/NP/UB)
C552	1-124-903-11	ELECT 1uF 20% 50V	(SLV-625/NC/NP/VP)
C553	1-124-907-11	ELECT 10uF 20% 50V	(SLV-625UB)
C554	1-124-907-11	ELECT 10uF 20% 50V	(SLV-625UB)
C571	1-162-212-31	CERAMIC 36PF 5% 50V	
C572	1-162-205-31	CERAMIC 18PF 5% 50V	
C573	1-124-907-11	ELECT 10uF 20% 50V	(SLV-625/NC/UB/VP)
C574	1-162-847-11	CERAMIC 0.047uF 20% 16V	
C601	1-124-907-11	ELECT 10uF 20% 50V	
C602	1-124-907-11	ELECT 10uF 20% 50V	
C603	1-124-907-11	ELECT 10uF 20% 50V	
C605	1-162-282-31	CERAMIC 100PF 10% 50V	(SLV-625/NC/UB/VP)
C607	1-162-290-31	CERAMIC 470PF 10% 50V	
C608	1-124-927-11	ELECT 4.7uF 20% 100V	
C609	1-124-927-11	ELECT 4.7uF 20% 100V	
C631	1-124-126-00	ELECT 47uF 20% 10V	
C632	1-126-177-11	ELECT 100uF 20% 10V	
C633	1-126-177-11	ELECT 100uF 20% 10V	
C634	1-124-443-00	ELECT 100uF 20% 10V	
C651	1-124-907-11	ELECT 10uF 20% 50V	
C652	1-124-907-11	ELECT 10uF 20% 50V	

Ref. No.	Part No.	Description	Remark
C653	1-124-907-11	ELECT 10uF 20% 50V	
C655	1-162-282-31	CERAMIC 100PF 10% 50V	(SLV-625/NC/UB/VP)
C657	1-162-290-31	CERAMIC 470PF 10% 50V	
C658	1-124-927-11	ELECT 4.7uF 20% 100V	
C659	1-124-927-11	ELECT 4.7uF 20% 100V	
C682	1-126-795-11	ELECT 10uF 20% 50V	
C683	1-126-795-11	ELECT 10uF 20% 50V	
C684	1-126-301-11	ELECT 1uF 20% 50V	
C685	1-161-377-00	CERAMIC 0.0047uF 30% 16V	
C686	1-126-795-11	ELECT 10uF 20% 50V	
C687	1-162-209-31	CERAMIC 27PF 5% 50V	
C688	1-161-375-00	CERAMIC 0.0022uF 20% 50V	
C689	1-126-794-11	ELECT 4.7uF 20% 50V	
C690	1-162-847-11	CERAMIC 0.047uF 20% 16V	
C699	1-102-959-00	CERAMIC 22PF 5% 50V	
C701	1-124-927-11	ELECT 4.7uF 20% 100V	
C702	1-124-126-00	ELECT 47uF 20% 10V	
C703	1-164-085-11	CERAMIC 0.001uF 10% 50V	
C707	1-130-488-00	MYLAR 0.027uF 5% 50V	
C708	1-164-086-11	CERAMIC 0.0012uF 10% 50V	
C709	1-162-286-31	CERAMIC 220PF 10% 50V	
C711	1-126-160-11	ELECT 1uF 20% 50V	
C712	1-164-083-11	CERAMIC 680PF 10% 50V	
C713	1-136-153-00	FILM 0.01uF 5% 50V	
C714	1-124-477-11	ELECT 47uF 20% 25V	
C716	1-124-903-11	ELECT 1uF 20% 50V	
C717	1-164-084-11	CERAMIC 820PF 10% 50V	
C718	1-126-233-11	ELECT 22uF 20% 50V	
C719	1-124-903-11	ELECT 1uF 20% 50V	
C721	1-161-045-00	CERAMIC 0.0033uF 10% 50V	
C722	1-124-464-11	ELECT 0.22uF 20% 50V	
C723	1-130-491-00	MYLAR 0.047uF 5% 50V	
C751	1-124-126-00	ELECT 47uF 20% 10V	
C752	1-164-087-11	CERAMIC 0.0015uF 10% 50V	
C753	1-136-561-11	FILM 0.0068uF 10% 400V	
C754	1-109-675-11	MICA 120PF 1% 500V	
C755	1-124-126-00	ELECT 47uF 20% 10V	
C756	1-164-087-11	CERAMIC 0.0015uF 10% 50V	
C757	1-136-153-00	FILM 0.01uF 5% 50V	
C758	1-162-844-11	CERAMIC 0.027uF 10% 16V	
C759	1-137-075-11	FILM 0.068uF 5% 100V	
C760	1-162-839-11	CERAMIC 0.01uF 10% 16V	
C781	1-124-126-00	ELECT 47uF 20% 10V	
C782	1-124-126-00	ELECT 47uF 20% 10V	
C783	1-124-126-00	ELECT 47uF 20% 10V	
C785	1-124-903-11	ELECT 1uF 20% 50V	
C786	1-124-903-11	ELECT 1uF 20% 50V	
C787	1-124-903-11	ELECT 1uF 20% 50V	
C801	1-124-907-11	ELECT 10uF 20% 50V	

When indication parts by reference number, please include the board name.

Ref. No.	Part No.	Description	Remark
C802	1-124-907-11	ELECT 10uF 20% 50V	
C803	1-124-903-11	ELECT 1uF 20% 50V	(SLV-625/NC/UB/VP)
C804	1-124-126-00	ELECT 47uF 20% 10V	(SLV-625/NC/UB/VP)
C804	1-124-903-11	ELECT 1uF 20% 50V	(SLV-625NP)
C805	1-161-379-00	CERAMIC 0.01uF 20% 25V	(SLV-625/NC/UB/VP)
C807	1-161-772-11	CERAMIC 0.1uF 10% 25V	
C809	1-162-282-31	CERAMIC 100PF 10% 50V	
C810	1-162-282-31	CERAMIC 100PF 10% 50V	(SLV-625VP)
C811	1-162-282-31	CERAMIC 100PF 10% 50V	(SLV-625VP)
C812	1-162-282-31	CERAMIC 100PF 10% 50V	(SLV-625VP)
		< CONNECTOR >	
CN101	1-506-473-11	CONNECTOR 8P, MALE	
CN102	1-506-474-11	CONNECTOR 9P, MALE	
CN103	1-569-344-11	CONNECTOR, BOARD TO BOARD 19P	
CN104	1-569-344-11	CONNECTOR, BOARD TO BOARD 19P	
CN105	1-563-599-11	CONNECTOR, FLEXIBLE 22P	
CN201	1-569-338-11	CONNECTOR, BOARD TO BOARD 19P	
CN202	1-569-338-11	CONNECTOR, BOARD TO BOARD 19P	
* CN203	1-508-742-00	PIN, CONNECTOR 3P	
* CN204	1-560-892-00	PIN, CONNECTOR 4P	
* CN205	1-566-709-11	CONNECTOR, BOARD TO BOARD 12P	
CN206	1-568-919-11	CONNECTOR, BOARD TO BOARD 9P	(SLV-625VP)
CN442	1-569-762-11	CONNECTOR, BOARD TO BOATD 20P	
CN601	1-506-473-11	CONNECTOR 8P, MALE	
CN602	1-580-856-11	PIN, CONNECTOR (PC BOARD) 14P	
CN603	1-580-849-11	PIN, CONNECTOR (PC BOARD) 20P	
* CN604	1-508-797-00	PIN, CONNECTOR 4P	
* CN605	1-508-742-00	PIN, CONNECTOR 3P	
* CN606	1-508-742-00	PIN, CONNECTOR 3P	
CN607	1-506-471-11	CONNECTOR 6P, MALE	
CN608	1-506-468-11	CONNECTOR 3P, MALE	
CN801	1-580-849-11	PIN, CONNECTOR (PC BOARD) 20P	(SLV-625NP)
* CN802	1-569-393-11	PIN, CONNECTOR (PC BOARD) 8P	(SLV-625NP)
CNJ102	1-568-528-11	JACK, PIN 3P (LINE OUT)	
CNJ103	1 568-016-11	SOCKET 21P (EURO AV)	(SLV-625/NC/UB/VP)
		< DIODE >	
D151	8-719-974-59	DIODE 1SR139-100	
D152	8-719-109-97	DIODE RD6.8ES-B2	
D153	8-719-911-19	DIODE 1SS119	
D154	8-719-911-19	DIODE 1SS119	
D157	8-719-911-19	DIODE 1SS119	
D158	8-719-911-19	DIODE 1SS119	
D502	8-719-911-19	DIODE 1SS119	
D503	8-719-911-19	DIODE 1SS119	(SLV-625NP)
D505	8-719-982-26	DIODE MTZJ-33B	
D601	8-719-911-19	DIODE 1SS119	

Ref. No.	Part No.	Description	Remark
D602	8-719-911-19	DIODE 1SS119	
D604	8-719-911-19	DIODE 1SS119	
D605	8-719-911-19	DIODE 1SS119	
D690	8-719-109-97	DIODE RD6.8ES-B2	
D691	8-719-109-97	DIODE RD6.8ES-B2	
D692	8-719-109-97	DIODE RD6.8ES-B2	(SLV-625/NC/UB/VP)
D693	8-719-108-12	DIODE RD9.1E-W	(SLV-625/NC/UB/VP)
D695	8-719-108-12	DIODE RD9.1E-W	
D696	8-719-108-12	DIODE RD9.1E-W	
D697	8-719-921-86	DIODE MTZJ-13	(SLV-625/NC/UB/VP)
D801	8-719-974-59	DIODE 1SR139-100	
		< IC >	
IC101	8-752-834-20	IC CXP80624-258Q	
IC102	8-759-038-87	IC MC68HC05P7BSC402047B	
IC203	8-759-246-14	IC TA8823N	
⚠ IC204	8-759-983-45	IC BA6238A	
IC501	8-759-512-95	IC TDA8415	(SLV-625/NC/NP/VP)
IC502	8-759-602-48	IC M5201L	(SLV-625UB)
IC503	8-759-602-48	IC M5201L	(SLV-625UB)
IC601	8-759-804-80	IC LA7235	
IC602	8-759-602-48	IC M5201L	
IC603	8-759-961-38	IC BA6138	
IC701	8-759-805-20	IC LA7297	
IC801	8-759-927-56	IC BA7021	
		< IF BLOCK >	
⚠ IF501	1-466-539-11	IF BLOCK (IFZ-389ST)	(SLV-625/VP)
⚠ IF501	1-466-538-11	IF BLOCK (IFZ-389NC)	(SLV-625NC/NP)
⚠ IF501	1-466-541-11	IF BLOCK (IFZ-395NC)	(SLV-625UB)
		< COIL >	
L151	1-408-409-00	INDUCTOR 10uH	
L152	1-408-409-00	INDUCTOR 10uH	
L221	1-410-509-11	INDUCTOR 10uH	
L501	1-410-509-11	INDUCTOR 10uH	(SLV-625/VP)
L502	1-410-509-11	INDUCTOR 10uH	(SLV-625/NC/NP/VP)
L503	1-410-509-11	INDUCTOR 10uH	(SLV-625NC/NP/UB)
L504	1-410-513-11	INDUCTOR 22uH	
L505	1-410-513-11	INDUCTOR 22uH	
L601	1-410-336-11	INDUCTOR 220uH	(SLV-625/NC/UB/VP)
L602	1-410-336-11	INDUCTOR 220uH	
L651	1-410-336-11	INDUCTOR 220uH	(SLV-625/NC/UB/VP)
L652	1-410-336-11	INDUCTOR 220uH	
L699	1-408-425-00	INDUCTOR 220uH	
L701	1-412-451-21	INDUCTOR 8.2mH	
L702	1-410-091-31	INDUCTOR 22mH	
L703	1-410-120-11	INDUCTOR 1.2mH	

When indication parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

MA-138

Ref. No.	Part No.	Description			Remark
L704	1-408-426-00	INDUCTOR	270uH		
L801	1-408-609-41	INDUCTOR	33uH		
L802	1-410-509-11	INDUCTOR	10uH		

< DECORDER BLOCK >

Ref. No.	Part No.	Description			Remark
NCM501	1-466-542-11	DECORDER BLOCK	(NCA-389)		(SLV-625NC/NP)
NCM501	1-466-543-11	DECORDER BLOCK	(NCA-395)		(SLV-625UB)

< TRANSISTOR >

Ref. No.	Part No.	Description			Remark
Q151	8-729-119-78	TRANSISTOR	2SC2785-HFE		
Q154	8-729-119-78	TRANSISTOR	2SC2785-HFE		
Q155	8-729-900-61	TRANSISTOR	DTA114ES		
Q156	8-729-119-78	TRANSISTOR	2SC2785-HFE		
Q201	8-729-119-78	TRANSISTOR	2SC2785-HFE		
Q202	8-729-119-76	TRANSISTOR	2SA1175-HFE		
Q501	8-729-111-55	TRANSISTOR	2SD1312-K		
Q502	8-729-303-37	TRANSISTOR	2SD655-E		
Q503	8-729-119-78	TRANSISTOR	2SC2785-HFE		(SLV-625/NC/NP/VP)
Q504	8-729-900-89	TRANSISTOR	DTC144ES		(SLV-625UB)
Q505	8-729-119-76	TRANSISTOR	2SA1175-HFE		(SLV-625/NP/UB/VP)
Q507	8-729-119-78	TRANSISTOR	2SC2785-HFE		(SLV-625NC/NP/UB)
Q601	8-729-119-78	TRANSISTOR	2SC2785-HFE		
Q605	8-729-900-89	TRANSISTOR	DTC144ES		
Q701	8-729-140-96	TRANSISTOR	2SD774-34		
Q702	8-729-140-96	TRANSISTOR	2SD774-34		
Q703	8-729-140-93	TRANSISTOR	2SB733-34		
Q802	8-729-900-89	TRANSISTOR	DTC144ES.		
Q803	8-729-119-76	TRANSISTOR	2SA1175-HFE		
Q804	8-729-900-89	TRANSISTOR	DTC144ES		(SLV-625/NC/UB/VP)
Q805	8-729-119-76	TRANSISTOR	2SA1175-HFE		(SLV-625/NC/UB/VP)

< RESISTOR >

Ref. No.	Part No.	Description			Remark
R151	1-249-433-11	CARBON	22K	5%	1/4W
R152	1-249-433-11	CARBON	22K	5%	1/4W
R153	1-249-429-11	CARBON	10K	5%	1/4W
R154	1-249-429-11	CARBON	10K	5%	1/4W
R157	1-249-417-11	CARBON	1K	5%	1/4W
R158	1-249-417-11	CARBON	1K	5%	1/4W
R159	1-249-433-11	CARBON	22K	5%	1/4W
R160	1-249-433-11	CARBON	22K	5%	1/4W
R161	1-249-433-11	CARBON	22K	5%	1/4W
R162	1-249-433-11	CARBON	22K	5%	1/4W
R163	1-249-417-11	CARBON	1K	5%	1/4W
R164	1-249-417-11	CARBON	1K	5%	1/4W
R166	1-249-427-11	CARBON	6.8K	5%	1/4W
R168	1-249-405-11	CARBON	100	5%	1/4W
R170	1-247-903-00	CARBON	1M	5%	1/4W
R171	1-249-429-11	CARBON	10K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R172	1-249-429-11	CARBON	10K	5%	1/4W
R173	1-249-429-11	CARBON	10K	5%	1/4W
R174	1-249-437-11	CARBON	47K	5%	1/4W
R175	1-249-437-11	CARBON	47K	5%	1/4W
R176	1-249-433-11	CARBON	22K	5%	1/4W
R177	1-249-429-11	CARBON	10K	5%	1/4W
R178	1-249-429-11	CARBON	10K	5%	1/4W
R179	1-249-425-11	CARBON	4.7K	5%	1/4W
R180	1-249-417-11	CARBON	1K	5%	1/4W
R182	1-249-433-11	CARBON	22K	5%	1/4W
R183	1-249-421-11	CARBON	2.2K	5%	1/4W
R201	1-249-429-11	CARBON	10K	5%	1/4W
R202	1-249-429-11	CARBON	10K	5%	1/4W
R221	1-249-405-11	CARBON	100	5%	1/4W
R223	1-249-425-11	CARBON	4.7K	5%	1/4W
R224	1-249-411-11	CARBON	330	5%	1/4W
R225	1-249-435-11	CARBON	33K	5%	1/4W
R226	1-249-425-11	CARBON	4.7K	5%	1/4W
R227	1-249-441-11	CARBON	100K	5%	1/4W
R228	1-247-901-11	CARBON	820K	5%	1/4W
R229	1-249-441-11	CARBON	100K	5%	1/4W
R230	1-249-439-11	CARBON	68K	5%	1/4W
R231	1-249-415-11	CARBON	680	5%	1/4W
R232	1-249-415-11	CARBON	680	5%	1/4W
R233	1-249-423-11	CARBON	3.3K	5%	1/4W
R234	1-249-423-11	CARBON	3.3K	5%	1/4W
R235	1-249-413-11	CARBON	470	5%	1/4W
⚠ R236	1-247-705-11	CARBON	270	5%	1/4W
R237	1-249-429-11	CARBON	10K	5%	1/4W
R501	1-249-429-11	CARBON	10K	5%	1/4W(SLV-625UB)
R502	1-249-429-11	CARBON	10K	5%	1/4W(SLV-625UB)
R504	1-249-429-11	CARBON	10K	5%	1/4W(SLV-625UB)
R505	1-249-429-11	CARBON	10K	5%	1/4W(SLV-625UB)
R506	1-249-429-11	CARBON	10K	5%	1/4W(SLV-625UB)
R507	1-249-441-11	CARBON	100K	5%	1/4W(SLV-625UB)
R508	1-249-441-11	CARBON	100K	5%	1/4W(SLV-625UB)
R509	1-249-441-11	CARBON	100K	5%	1/4W
R510	1-249-441-11	CARBON	100K	5%	1/4W
R522	1-249-419-11	CARBON	1.5K	5%	1/4W(SLV-625/NC/NP/VP)
R523	1-249-417-11	CARBON	1K	5%	1/4W(SLV-625/NC/NP/VP)
R524	1-249-421-11	CARBON	2.2K	5%	1/4W
R525	1-247-895-00	CARBON	470K	5%	1/4W
R526	1-249-437-11	CARBON	47K	5%	1/4W(SLV-625UB)
R527	1-249-437-11	CARBON	47K	5%	1/4W(SLV-625UB)
R528	1-249-417-11	CARBON	1K	5%	1/4W(SLV-625/NC/NP/VP)
R529	1-249-417-11	CARBON	1K	5%	1/4W(SLV-625/NC/NP/VP)
R530	1-249-420-11	CARBON	1.8K	5%	1/4W(SLV-625/NC/NP/VP)
R531	1-249-417-11	CARBON	1K	5%	1/4W

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

When indication parts by reference number, please include the board name.

Ref. No.	Part No.	Description	Remark
R532	1-249-417-11	CARBON 1K 5% 1/4W	
R533	1-249-417-11	CARBON 1K 5% 1/4W	
R534	1-249-417-11	CARBON 1K 5% 1/4W	
R535	1-249-417-11	CARBON 1K 5% 1/4W	
R536	1-249-417-11	CARBON 1K 5% 1/4W	
R537	1-249-428-11	CARBON 8.2K 5% 1/4W	(SLV-625NC/NP/UB)
R538	1-249-430-11	CARBON 12K 5% 1/4W	(SLV-625NC/NP/UB)
R539	1-249-423-11	CARBON 3.3K 5% 1/4W	(SLV-625/VP)
R540	1-249-433-11	CARBON 22K 5% 1/4W	(SLV-625/VP)
R541	1-249-429-11	CARBON 10K 5% 1/4W	(SLV-625NP)
R551	1-249-429-11	CARBON 10K 5% 1/4W	(SLV-625UB)
R552	1-249-429-11	CARBON 10K 5% 1/4W	(SLV-625UB)
R554	1-249-429-11	CARBON 10K 5% 1/4W	(SLV-625UB)
R555	1-249-429-11	CARBON 10K 5% 1/4W	(SLV-625UB)
R556	1-249-429-11	CARBON 10K 5% 1/4W	(SLV-625UB)
R557	1-249-441-11	CARBON 100K 5% 1/4W	(SLV-625UB)
R558	1-249-441-11	CARBON 100K 5% 1/4W	(SLV-625UB)
R559	1-249-441-11	CARBON 100K 5% 1/4W	(SLV-625UB)
R560	1-249-441-11	CARBON 100K 5% 1/4W	(SLV-625UB)
R572	1-249-417-11	CARBON 1K 5% 1/4W	
R573	1-249-425-11	CARBON 4.7K 5% 1/4W	
R574	1-249-405-11	CARBON 100 5% 1/4W	
R575	1-249-429-11	CARBON 10K 5% 1/4W	
R601	1-249-426-11	CARBON 5.6K 5% 1/4W	(SLV-625/NC/UB/VP)
R602	1-249-422-11	CARBON 2.7K 5% 1/4W	
R603	1-249-425-11	CARBON 4.7K 5% 1/4W	
R604	1-249-417-11	CARBON 1K 5% 1/4W	
R605	1-249-408-11	CARBON 180 5% 1/4W	
R606	1-249-428-11	CARBON 8.2K 5% 1/4W	
R607	1-249-429-11	CARBON 10K 5% 1/4W	
R608	1-247-891-00	CARBON 330K 5% 1/4W	
R621	1-249-429-11	CARBON 10K 5% 1/4W	
R631	1-249-425-11	CARBON 4.7K 5% 1/4W	
R632	1-249-429-11	CARBON 10K 5% 1/4W	
R635	1-249-429-11	CARBON 10K 5% 1/4W	
R639	1-249-429-11	CARBON 10K 5% 1/4W	(SLV-625NP)
R651	1-249-426-11	CARBON 5.6K 5% 1/4W	(SLV-625/NC/UB/VP)
R652	1-249-421-11	CARBON 2.2K 5% 1/4W	
R653	1-249-425-11	CARBON 4.7K 5% 1/4W	
R654	1-249-417-11	CARBON 1K 5% 1/4W	
R655	1-249-408-11	CARBON 180 5% 1/4W	
R656	1-249-428-11	CARBON 8.2K 5% 1/4W	
R657	1-249-429-11	CARBON 10K 5% 1/4W	
R658	1-247-891-00	CARBON 330K 5% 1/4W	
R671	1-249-429-11	CARBON 10K 5% 1/4W	
R679	1-249-423-11	CARBON 3.3K 5% 1/4W	
R681	1-247-887-00	CARBON 220K 5% 1/4W	
R682	1-249-429-11	CARBON 10K 5% 1/4W	
R683	1-249-429-11	CARBON 10K 5% 1/4W	

Ref. No.	Part No.	Description	Remark
R684	1-249-417-11	CARBON 1K 5% 1/4W	
R685	1-249-441-11	CARBON 100K 5% 1/4W	
R686	1-247-883-00	CARBON 150K 5% 1/4W	
R687	1-249-434-11	CARBON 27K 5% 1/4W	
R688	1-249-431-11	CARBON 15K 5% 1/4W	
R689	1-249-437-11	CARBON 47K 5% 1/4W	
R690	1-249-427-11	CARBON 6.8K 5% 1/4W	
R691	1-249-409-11	CARBON 220 5% 1/4W	
R692	1-249-420-11	CARBON 1.8K 5% 1/4W	
R693	1-249-441-11	CARBON 100K 5% 1/4W	
R694	1-249-425-11	CARBON 4.7K 5% 1/4W	
R695	1-249-429-11	CARBON 10K 5% 1/4W	
R696	1-249-429-11	CARBON 10K 5% 1/4W	
R697	1-247-889-00	CARBON 270K 5% 1/4W	
R699	1-249-429-11	CARBON 10K 5% 1/4W	
R701	1-249-438-11	CARBON 56K 5% 1/4W	
R702	1-249-423-11	CARBON 3.3K 5% 1/4W	
R704	1-249-427-11	CARBON 6.8K 5% 1/4W	
R705	1-249-441-11	CARBON 100K 5% 1/4W	
R706	1-249-428-11	CARBON 8.2K 5% 1/4W	
R707	1-249-424-11	CARBON 3.9K 5% 1/4W	
R709	1-249-407-11	CARBON 150 5% 1/4W	
R710	1-249-429-11	CARBON 10K 5% 1/4W	
R711	1-249-393-11	CARBON 10 5% 1/4W	
R714	1-247-885-00	CARBON 180K 5% 1/4W	
R715	1-249-429-11	CARBON 10K 5% 1/4W	
R717	1-249-437-11	CARBON 47K 5% 1/4W	
R718	1-249-430-11	CARBON 12K 5% 1/4W	
R721	1-247-903-00	CARBON 1M 5% 1/4W	
R722	1-249-411-11	CARBON 330 5% 1/4W	
R723	1-249-436-11	CARBON 39K 5% 1/4W	
R724	1-249-412-11	CARBON 390 5% 1/4W	
R725	1-249-412-11	CARBON 390 5% 1/4W	
R751	1-249-387-11	CARBON 3.3 5% 1/4W	
R752	1-249-434-11	CARBON 27K 5% 1/4W	
R753	1-249-387-11	CARBON 3.3 5% 1/4W	
R754	1-249-429-11	CARBON 10K 5% 1/4W	
R755	1-249-433-11	CARBON 22K 5% 1/4W	
R756	1-249-429-11	CARBON 10K 5% 1/4W	
R757	1-249-429-11	CARBON 10K 5% 1/4W	
R781	1-249-429-11	CARBON 10K 5% 1/4W	
R783	1-249-429-11	CARBON 10K 5% 1/4W	
R784	1-249-429-11	CARBON 10K 5% 1/4W	
R801	1-249-417-11	CARBON 1K 5% 1/4W	
R802	1-249-428-11	CARBON 8.2K 5% 1/4W	
R803	1-249-426-11	CARBON 5.6K 5% 1/4W	(SLV-625/NC/UB/VP)
R804	1-249-417-11	CARBON 1K 5% 1/4W	(SLV-625/NC/UB/VP)
R805	1-247-804-11	CARBON 75 5% 1/4W	(SLV-625/NC/UB/VP)

When indication parts by reference number, please include the board name.

MA-138 MD-55

Ref. No.	Part No.	Description	Remark
R806	1-249-417-11	CARBON 1K 5% 1/4W	
R830	1-249-437-11	CARBON 47K 5% 1/4W	(SLV-625/NC/UB/VP)
R831	1-249-437-11	CARBON 47K 5% 1/4W	(SLV-625NP)
R880	1-249-437-11	CARBON 47K 5% 1/4W	(SLV-625/NC/UB/VP)
R881	1-249-437-11	CARBON 47K 5% 1/4W	(SLV-625NP)

< RF MODULATOR >

Ref. No.	Part No.	Description	Remark
⚠RF501	1-466-328-11	MODULATOR, RF(RFU-2017)	(SLV-625/NC/NP/VP)
⚠RF501	1-466-347-11	MODULATOR, RF(RFU-2024)	(SLV-625UB)

< VARIABLE RESISTOR >

Ref. No.	Part No.	Description	Remark
RV101	1-241-080-11	RES, ADJ, CARBON 10K	
RV102	1-241-080-11	RES, ADJ, CARBON 10K	
RV501	1-241-079-11	RES, ADJ, CARBON 4.7K	(SLV-625/NC/NP/VP)
RV601	1-241-077-11	RES, ADJ, CARBON 2.2K	
RV751	1-238-021-11	RES, ADJ, CARBON 220K	

< TRANSFORMER >

Ref. No.	Part No.	Description	Remark
T701	1-433-352-11	TRANSFORMER, BIAS OSCILLATION	
T702	1-406-349-11	TRANSFORMER, OSCILLATION	

< TUNER >

Ref. No.	Part No.	Description	Remark
⚠TU501	1-465-260-11	TUNER, ET (BTP-2C401)	(SLV-625/NC/NP/VP)
⚠TU501	1-465-262-11	TUNER, ET (BTP-2U601)	(SLV-625UB)

< CRYSTAL >

Ref. No.	Part No.	Description	Remark
X101	1-578-774-11	VIBRATOR, CRYSTAL (12MHz)	
X102	1-567-192-11	OSCILLATOR, CERAMIC (4MHz)	
X501	1-567-925-11	VIBRATOR, CRYSTAL (10MHz)	(SLV-625/NC/NP/VP)

****

A-6754-352-A MD-55 BOARD, COMPLETE
****
(Ref. No. 2,000 Series)

2-387-601-01 CUSHION, RUBBER

< CAPACITOR >

Ref. No.	Part No.	Description			
C001	1-161-494-00	CERAMIC	0.022uF		25V
C002	1-161-494-00	CERAMIC	0.022uF		25V
C003	1-126-157-11	ELECT	10uF	20%	16V
C004	1-161-379-00	CERAMIC	0.01uF	20%	25V
C005	1-126-157-11	ELECT	10uF	20%	16V
C006	1-124-589-11	ELECT	47uF	20%	16V
C008	1-164-159-11	CERAMIC	0.1uF		50V
C009	1-164-159-11	CERAMIC	0.1uF		50V
C011	1-162-849-11	CERAMIC	0.068uF	10%	16V
C012	1-162-849-11	CERAMIC	0.068uF	10%	16V
C013	1-162-849-11	CERAMIC	0.068uF	10%	16V
C014	1-126-160-11	ELECT	1uF	20%	50V
C016	1-124-589-11	ELECT	47uF	20%	16V
C017	1-126-162-11	ELECT	3.3uF	20%	50V
C018	1-124-589-11	ELECT	47uF	20%	16V
C019	1-124-589-11	ELECT	47uF	20%	16V
C020	1-164-159-11	CERAMIC	0.1uF		50V
C021	1-162-292-31	CERAMIC	680PF	10%	50V
C025	1-162-294-31	CERAMIC	0.001uF	10%	50V
C026	1-162-294-31	CERAMIC	0.001uF	10%	50V
C101	1-126-153-11	ELECT	22uF	20%	6.3V
C102	1-126-157-11	ELECT	10uF	20%	16V

< CONNECTOR >

Ref. No.	Part No.	Description	Remark
CN001	1-506-494-11	PIN, CONNECTOR 15P	
CN002	1-569-335-11	CONNECTOR, BOARD TO BOARD 9P	
CN003	1-691-643-11	CONNECTOR, BOARD TO BOARD	
CN004	1-569-341-11	CONNECTOR, BOARD TO BOARD 19P	
CN005	1-506-482-11	CONNECTOR 3P, MALE	
CN006	1-569-333-11	CONNECTOR, BOARD TO BOARD 3P	
CN007	1-569-341-11	CONNECTOR, BOARD TO BOARD 19P	

< DIODE >

Ref. No.	Part No.	Description	Remark
D001	8-719-985-00	DIODE GL451VS1	
D004	8-719-921-54	DIODE MTZJ-6.2B	
D005	8-719-921-54	DIODE MTZJ-6.2B	
D006	8-719-921-54	DIODE MTZJ-6.2B	
D007	8-719-921-54	DIODE MTZJ-6.2B	

< IC >

Ref. No.	Part No.	Description	Remark
IC002	8-759-938-12	IC BA10324	
⚠IC004	8-759-234-03	IC TA8424F	
IC101	8-759-008-70	IC LM358N	

< PHOTO INTERRUPTER >

Ref. No.	Part No.	Description	Remark
PH001	8-759-144-33	IC PS6002	
PH002	8-759-144-33	IC PS6002	

< IC LINK >

Ref. No.	Part No.	Description	Remark
⚠PS001	1-532-685-00	LINK, IC	

< TRANSISTOR >

Ref. No.	Part No.	Description	Remark
Q001	8-729-926-31	TRANSISTOR PT483F1S	
Q002	8-729-926-31	TRANSISTOR PT483F1S	

< RESISTOR >

Ref. No.	Part No.	Description			
R001	1-249-423-11	CARBON	3.3K	5%	1/4W
R002	1-249-423-11	CARBON	3.3K	5%	1/4W
R003	1-249-426-11	CARBON	5.6K	5%	1/4W

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indication parts by reference number, please include the board name.

Ref. No.	Part No.	Description				Remark
R004	1-249-426-11	CARBON	5.6K	5%	1/4W	
R005	1-249-415-11	CARBON	680	5%	1/4W	
R006	1-249-441-11	CARBON	100K	5%	1/4W	
R007	1-249-441-11	CARBON	100K	5%	1/4W	
R008	1-249-425-11	CARBON	4.7K	5%	1/4W	
R009	1-249-409-11	CARBON	220	5%	1/4W	
R010	1-249-425-11	CARBON	4.7K	5%	1/4W	
R011	1-249-437-11	CARBON	47K	5%	1/4W	
R012	1-249-421-11	CARBON	2.2K	5%	1/4W	
R013	1-249-429-11	CARBON	10K	5%	1/4W	
R014	1-249-426-11	CARBON	5.6K	5%	1/4W	
R015	1-249-437-11	CARBON	47K	5%	1/4W	
R016	1-249-421-11	CARBON	2.2K	5%	1/4W	
R019	1-249-377-11	CARBON	0.47	5%	1/4W	F
R020	1-249-406-11	CARBON	120	5%	1/4W	
R021	1-249-383-11	CARBON	1.5	5%	1/6W	
R022	1-249-408-11	CARBON	180	5%	1/4W	
R023	1-249-414-11	CARBON	560	5%	1/4W	
R024	1-249-417-11	CARBON	1K	5%	1/4W	
R025	1-247-891-00	CARBON	330K	5%	1/4W	
R027	1-249-383-11	CARBON	1.5	5%	1/6W	
R028	1-249-383-11	CARBON	1.5	5%	1/6W	
R101	1-249-417-11	CARBON	1K	5%	1/4W	
R102	1-249-417-11	CARBON	1K	5%	1/4W	
R103	1-247-885-00	CARBON	180K	5%	1/4W	
R104	1-249-429-11	CARBON	10K	5%	1/4W	
R105	1-249-429-11	CARBON	10K	5%	1/4W	
R106	1-249-429-11	CARBON	10K	5%	1/4W	
R107	1-249-429-11	CARBON	10K	5%	1/4W	
R108	1-249-433-11	CARBON	22K	5%	1/4W	
R112	1-249-429-11	CARBON	10K	5%	1/4W	

< SWITCH >

S001	1-570-953-11	SWITCH, PUSH (1 KEY) (CASSETTE UP/DOWN)
S002	1-570-953-11	SWITCH, PUSH (1 KEY) (REC PROOF)

****

* A-6721-457-A MF-162 BOARD, COMPLETE (SLV-625)

****

* A-6721-451-A MF-162 BOARD, COMPLETE (SLV-625NC)

****

* A-6721-453-A MF-162 BOARD, COMPLETE (SLV-625NP)

****

* A-6721-452-A MF-162 BOARD, COMPLETE (SLV-625UB)

****

* A-6721-454-A MF-162 BOARD, COMPLETE (SLV-625VP)

****

(Ref. No. 4,000 Series)

* 3-942-846-01 HOLDER, FL

< CAPACITOR >

Ref. No.	Part No.	Description			Remark
C303	1-164-026-11	CERAMIC	20PF	5%	50V
C304	1-164-159-11	CERAMIC	0.1uF		50V
C305	1-161-379-00	CERAMIC	0.01uF	20%	25V
C306	1-128-057-11	ELECT	330uF	20%	6.3V
C307	1-125-486-11	DOUBLE LAYERS	0.22F		5.5V
C308	1-164-159-11	CERAMIC	0.1uF		50V
C309	1-164-159-11	CERAMIC	0.1uF		50V
C310	1-126-096-11	ELECT	10uF	20%	35V
C311	1-161-327-00	CERAMIC	0.0033uF	30%	16V
C312	1-161-379-00	CERAMIC	0.01uF	20%	25V
C313	1-164-026-11	CERAMIC	20PF	5%	50V
C320	1-164-096-11	CERAMIC	0.01uF		50V

< CONNECTOR >

CN301	1-569-342-11	CONNECTOR, BOARD TO BOARD 19P
CN302	1-569-342-11	CONNECTOR, BOARD TO BOARD 19P
CN303	1-562-631-11	SOCKET, CONNECTOR
CN304	1-569-815-11	CONNECTOR, BOARD TO BOARD 21P
* CN305	1-506-608-11	PIN, CONNECTOR 10P
CN306	1-506-471-11	CONNECTOR 6P, MALE

< DIODE >

D301	8-719-974-59	DIODE	1SR139-100
D302	8-719-974-59	DIODE	1SR139-100
D303	8-719-110-08	DIODE	RD8.2ES-B2
D304	8-719-109-97	DIODE	RD6.8ES-B2
D305	8-719-109-97	DIODE	RD6.8ES-B2
D306	8-719-911-19	DIODE	1SS119
D310	8-719-974-59	DIODE	1SR139-100
D315	8-719-109-97	DIODE	RD6.8ES-B2
D316	8-719-109-97	DIODE	RD6.8ES-B2
D317	8-719-109-97	DIODE	RD6.8ES-B2
D320	8-719-109-97	DIODE	RD6.8ES-B2
D321	8-719-109-97	DIODE	RD6.8ES-B2

< FILTER >

FL301	1-519-679-11	INDICATOR TUBE, FLUORESCENT

< IC >

IC301	8-752-834-19	IC	CXP50116-274Q	
IC302	8-759-505-83	IC	S-8054ALR-Z	
IC303	8-759-941-78	IC	S-8053ALB	
IC304	8-759-501-99	IC	ST93C46AB1	(SLV-625/NC/UB/VP)
IC304	8-759-502-00	IC	ST93CS56B1	(SLV-625NP)

When indication parts by reference number, please include the board name.

MF-162 MF-163

< TRANSISTOR >

Ref. No.	Part No.	Description	Remark
Q301	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q302	8-729-119-78	TRANSISTOR 2SC2785-HFE	

< RESISTOR >

Ref. No.	Part No.	Description	Remark
R301	1-249-429-11	CARBON 10K 5% 1/4W	
R302	1-247-895-00	CARBON 470K 5% 1/4W	
R303	1-249-423-11	CARBON 3.3K 5% 1/4W	
R307	1-249-425-11	CARBON 4.7K 5% 1/4W	
R308	1-249-425-11	CARBON 4.7K 5% 1/4W	
R309	1-249-425-11	CARBON 4.7K 5% 1/4W	
R310	1-249-425-11	CARBON 4.7K 5% 1/4W	
R311	1-249-425-11	CARBON 4.7K 5% 1/4W	
R312	1-249-425-11	CARBON 4.7K 5% 1/4W	
R313	1-249-425-11	CARBON 4.7K 5% 1/4W	
R314	1-249-417-11	CARBON 1K 5% 1/4W	
R315	1-249-427-11	CARBON 6.8K 5% 1/4W	
R317	1-249-423-11	CARBON 3.3K 5% 1/4W	(SLV-625NC)
R317	1-249-419-11	CARBON 1.5K 5% 1/4W	(SLV-625NP)
R317	1-249-427-11	CARBON 6.8K 5% 1/4W	(SLV-625UB)
R317	1-249-431-11	CARBON 15K 5% 1/4W	(SLV-625VP)
R320	1-249-420-11	CARBON 1.8K 5% 1/4W	
R321	1-249-429-11	CARBON 10K 5% 1/4W	
R322	1-249-417-11	CARBON 1K 5% 1/4W	
R324	1-249-425-11	CARBON 4.7K 5% 1/4W	
R325	1-249-425-11	CARBON 4.7K 5% 1/4W	
R326	1-249-429-11	CARBON 10K 5% 1/4W	
R327	1-249-429-11	CARBON 10K 5% 1/4W	
R328	1-249-417-11	CARBON 1K 5% 1/4W	
R334	1-249-429-11	CARBON 10K 5% 1/4W	
R335	1-249-417-11	CARBON 1K 5% 1/4W	
R336	1-249-417-11	CARBON 1K 5% 1/4W	
R337	1-249-417-11	CARBON 1K 5% 1/4W	
R338	1-249-417-11	CARBON 1K 5% 1/4W	
R340	1-249-427-11	CARBON 6.8K 5% 1/4W	
R345	1-249-425-11	CARBON 4.7K 5% 1/4W	
R346	1-249-425-11	CARBON 4.7K 5% 1/4W	
R347	1-249-425-11	CARBON 4.7K 5% 1/4W	
R348	1-249-429-11	CARBON 10K 5% 1/4W	

< SWITCH >

Ref. No.	Part No.	Description	Remark
S301	1-571-977-11	SWITCH, TACTIL (CL)	

< CRYSTAL >

Ref. No.	Part No.	Description	Remark
X301	1-577-101-11	VIBRATOR, CERAMIC (4.19MHz)	
X302	1-579-463-11	VIBRATOR, CRYSTAL (32.758MHz)	

****

Ref. No.	Part No.	Description	Remark
*	A-6754-415-A	MF-163 BOARD, COMPLETE (SLV-625/NC/NP) **********************	
*	A-6754-414-A	MF-163 BOARD, COMPLETE (SLV-625UB) **********************	
*	A-6754-416-A	MF-163 BOARD, COMPLETE (SLV-625VP) **********************	

(Ref. No. 4,000 Series)

< CAPACITOR >

Ref. No.	Part No.	Description	Remark
C101	1-162-282-31	CERAMIC 100PF 10% 50V	(SLV-625VP)
C102	1-162-282-31	CERAMIC 100PF 10% 50V	(SLV-625VP)
C103	1-162-282-31	CERAMIC 100PF 10% 50V	(SLV-625VP)
C104	1-162-282-31	CERAMIC 100PF 10% 50V	(SLV-625VP)

< CONNECTOR >

Ref. No.	Part No.	Description	Remark
CN101	1-569-814-11	CONNECTOR, BOARD TO BOARD 21P	
CNJ101	1-580-845-11	JACK, PIN 3P (LINE IN2)	
CNJ103	1-562-808-11	JACK (MIC)	

< DIODE >

Ref. No.	Part No.	Description	Remark
D101	8-719-940-82	LED SLR34MC3	
D102	8-719-940-82	LED SLR34MC3	
D103	8-719-940-99	DIODE SLH-34VC3	(SLV-625UB)
D104	8-719-940-99	DIODE SLH-34VC3	(SLV-625UB)
D108	8-719-109-97	DIODE RD6.8ES-B2	
D109	8-719-109-97	DIODE RD6.8ES-B2	

< COIL >

Ref. No.	Part No.	Description	Remark
L101	1-410-336-11	INDUCTOR 220uH	(SLV-625NP/VP)
L102	1-410-336-11	INDUCTOR 220uH	(SLV-625NP/VP)

< TRANSISTOR >

Ref. No.	Part No.	Description	Remark
Q101	8-729-900-61	TRANSISTOR DTA114ES	(SLV-625UB)

< RESISTOR >

Ref. No.	Part No.	Description	Remark
R101	1-249-401-11	CARBON 47 5% 1/4W	
R104	1-249-423-11	CARBON 3.3K 5% 1/4W	
R106	1-249-429-11	CARBON 10K 5% 1/4W	
R107	1-249-429-11	CARBON 10K 5% 1/4W	
R108	1-247-804-11	CARBON 75 5% 1/4W	
R109	1-249-407-11	CARBON 150 5% 1/4W	(SLV-625UB)
R110	1-249-407-11	CARBON 150 5% 1/4W	(SLV-625UB)

< VARIABLE RESISTOR >

Ref. No.	Part No.	Description	Remark
RV101	1-230-819-11	RES, VAR, CARBON 2K (SHARPNESS)	

When indication parts by reference number, please include the board name.

	Ref. No.	Part No.	Description	Remark
			< SWITCH >	
	S101	1-571-977-11	SWITCH, TACTIL (ON/STANDBY)	
	S102	1-571-977-11	SWITCH, TACTIL (EJECT)	
	S103	1-570-865-11	SWITCH, SLIDE(COLOR SYSTEM) (SLV-625VP)	
			**	
*		A-6720-456-A	MF-164 BOARD, COMPLETE ********************** (Ref. No. 4,000 Series)	
			< BUZZER >	
	BZ201	1-529-080-11	BUZZER, PIEZOELECTRIC	
			< CONNECTOR >	
*	CN201	1-562-334-00	SOCKET, CONNECTOR 10P	
	CN202	1-580-850-11	CONNECTOR (DMS) 8P	
			< IC >	
	IC201	1-466-131-21	IC GP1U52X	
			< TRANSISTOR >	
	Q201	8-729-900-89	TRANSISTOR DTC144ES	
			< RESISTOR >	
	R201	1-249-419-11	CARBON 1.5K 5% 1/4W	
	R202	1-249-420-11	CARBON 1.8K 5% 1/4W	
	R204	1-249-419-11	CARBON 1.5K 5% 1/4W	
	R205	1-249-437-11	CARBON 47K 5% 1/4W	
	R206	1-249-421-11	CARBON 2.2K 5% 1/4W	
			< SWITCH >	
	S202	1-571-977-11	SWITCH, TACTIL (PAUSE)	
	S203	1-571-977-11	SWITCH, TACTIL (HI-SPEED REWIND)	
			**	
*		A-6756-355-A	OS-13 BOARD, COMPLETE (SLB-625/NC/NP/UB) *********************	
*		A-6756-353-A	OS-13 BOARD, COMPLETE (SLV-625VP) ********************* (Ref. No. 4,000 Series)	
*		3-738-015-01	COVER, (DIA. 6) CARBON VR	
			< CAPACITOR >	
	C402	1-162-847-11	CERAMIC 0.047uF 10% 16V	
	C403	1-124-126-00	ELECT 47uF 20% 10V	
	C404	1-102-961-00	CERAMIC 27PF 5% 50V	
	C405	1-164-060-11	CERAMIC 39PF 5% 50V (SLV-625VP)	
	C406	1-124-907-11	ELECT 10uF 20% 50V	
	C407	1-164-058-11	CERAMIC 33PF 5% 50V (SLV-625VP)	
	C408	1-124-126-00	ELECT 47uF 20% 10V	
	C409	1-162-847-11	CERAMIC 0.047uF 10% 16V	
	C410	1-162-839-11	CERAMIC 0.01uF 10% 16V	
	C411	1-124-126-00	ELECT 47uF 20% 10V	
	C412	1-124-903-11	ELECT 1uF 20% 50V	
	C413	1-162-839-11	CERAMIC 0.01uF 10% 16V	
	C414	1-162-839-11	CERAMIC 0.01uF 10% 16V	
	C415	1-164-023-11	CERAMIC 15PF 5% 50V	
	C416	1-164-052-11	CERAMIC 18PF 5% 50V	
	C417	1-162-839-11	CERAMIC 0.01uF 10% 16V	
	C419	1-162-835-11	CERAMIC 0.0047uF 10% 16V	
	C420	1-162-827-11	CERAMIC 0.001uF 10% 16V	
	C421	1-124-925-11	ELECT 2.2uF 20% 100V	
	C422	1-124-126-00	ELECT 47uF 20% 10V	
	C451	1-124-126-00	ELECT 47uF 20% 10V	
	C452	1-162-839-11	CERAMIC 0.01uF 10% 16V	
	C453	1-102-980-00	CERAMIC 270PF 5% 50V	
	C454	1-102-980-00	CERAMIC 270PF 5% 50V	
	C457	1-102-122-00	CERAMIC 0.0027uF 10% 50V	
	C458	1-162-843-11	CERAMIC 0.022uF 10% 16V	
	C459	1-124-903-11	ELECT 1uF 20% 50V	
	C460	1-162-851-11	CERAMIC 0.1uF 10% 16V	
	C461	1-164-082-11	CERAMIC 560PF 10% 50V	
	C470	1-162-847-11	CERAMIC 0.047uF 10% 16V	
	C471	1-124-471-00	ELECT 1000uF 20% 6.3V	
			< CONNECTOR >	
	CN401	1-506-485-11	CONNECTOR 6P, MALE	
	CN402	1-580-180-11	CONNECTOR, BOARD TO BOARD 20P	
			< TRIMMER >	
	CT401	1-141-227-00	CAP, TRIMMER 20PF	
			< DIODE >	
	D401	8-719-911-19	DIODE 1SS119	
	D402	8-719-911-19	DIODE 1SS119	
	D403	8-719-911-19	DIODE 1SS119	
	D450	8-719-911-19	DIODE 1SS119	
			< IC >	
	IC401	8-759-634-22	IC M50554-182SP	
	IC402	8-759-996-03	IC LVA519S	
			< COIL >	
	L401	1-408-421-00	INDUCTOR 100uH	
	L402	1-412-470-21	INDUCTOR 22uH	
	L403	1-408-415-00	INDUCTOR 33uH (SLV-625VP)	

When indication parts by reference number, please include the board name.

OS-13 POWER BLOCK

Ref. No.	Part No.	Description		Remark
L405	1-408-414-00	INDUCTOR	27uH	
L406	1-408-415-00	INDUCTOR	33uH	
L407	1-408-421-00	INDUCTOR	100uH	
L420	1-410-316-11	INDUCTOR	1uH	
L421	1-410-513-11	INDUCTOR	22uH	

< TRANSISTOR >

Ref. No.	Part No.	Description		Remark
Q402	8-729-119-78	TRANSISTOR	2SC2785-HFE	(SLV-625VP)
Q403	8-729-119-78	TRANSISTOR	2SC2785-HFE	
Q404	8-729-119-78	TRANSISTOR	2SC2785-HFE	
Q405	8-729-900-61	TRANSISTOR	DTA114ES	
Q406	8-729-119-76	TRANSISTOR	2SA1175-HFE	
Q407	8-729-119-78	TRANSISTOR	2SC2785-HFE	
Q408	8-729-119-76	TRANSISTOR	2SA1175-HFE	
Q409	8-729-119-78	TRANSISTOR	2SC2785-HFE	
Q470	8-729-119-76	TRANSISTOR	2SA1175-HFE	

< RESISTOR >

Ref. No.	Part No.	Description				Remark
R404	1-249-413-11	CARBON	470	5%	1/4W	
R405	1-249-413-11	CARBON	470	5%	1/4W	
R409	1-249-409-11	CARBON	220	5%	1/4W	
R410	1-249-429-11	CARBON	10K	5%	1/4W(SLV-625VP)	
R411	1-249-423-11	CARBON	3.3K	5%	1/4W	
R412	1-249-421-11	CARBON	2.2K	5%	1/4W	
R413	1-249-414-11	CARBON	560	5%	1/4W	
R414	1-249-433-11	CARBON	22K	5%	1/4W	
R415	1-249-409-11	CARBON	220	5%	1/4W	
R416	1-247-810-11	CARBON	130	5%	1/4W	
R417	1-249-407-11	CARBON	150	5%	1/4W	
R418	1-249-403-11	CARBON	68	5%	1/4W	
R419	1-249-414-11	CARBON	560	5%	1/4W	
R420	1-249-420-11	CARBON	1.8K	5%	1/4W	
R424	1-249-429-11	CARBON	10K	5%	1/4W	
R425	1-249-422-11	CARBON	2.7K	5%	1/4W	
R426	1-249-421-11	CARBON	2.2K	5%	1/4W	
R427	1-249-415-11	CARBON	680	5%	1/4W	
R428	1-249-414-11	CARBON	560	5%	1/4W	
R429	1-249-422-11	CARBON	2.7K	5%	1/4W	
R430	1-249-424-11	CARBON	3.9K	5%	1/4W	
R431	1-249-421-11	CARBON	2.2K	5%	1/4W	
R432	1-249-423-11	CARBON	3.3K	5%	1/4W	
R433	1-249-429-11	CARBON	10K	5%	1/4W(SLV-625VP)	
R434	1-249-419-11	CARBON	1.5K	5%	1/4W	
R435	1-247-903-00	CARBON	1M	5%	1/4W	
R436	1-249-422-11	CARBON	2.7K	5%	1/4W	
R437	1-249-429-11	CARBON	10K	5%	1/4W	
R438	1-249-424-11	CARBON	3.9K	5%	1/4W	
R440	1-249-417-11	CARBON	1K	5%	1/4W	
R441	1-249-419-11	CARBON	1.5K	5%	1/4W	
R451	1-249-429-11	CARBON	10K	5%	1/4W	
R452	1-249-429-11	CARBON	10K	5%	1/4W	
R453	1-249-422-11	CARBON	2.7K	5%	1/4W	
R454	1-249-434-11	CARBON	27K	5%	1/4W	
R456	1-249-429-11	CARBON	10K	5%	1/4W	
R457	1-247-903-00	CARBON	1M	5%	1/4W	
R458	1-249-414-11	CARBON	560	5%	1/4W	
R460	1-249-417-11	CARBON	1K	5%	1/4W	
R461	1-249-441-11	CARBON	100K	5%	1/4W	
R470	1-249-406-11	CARBON	120	5%	1/4W	
R471	1-247-804-11	CARBON	75	5%	1/4W	

< VARIABLE RESISTOR >

Ref. No.	Part No.	Description
RV451	1-238-015-11	RES, ADJ, CARBON 4.7K

< CRYSTAL >

Ref. No.	Part No.	Description
X401	1-577-289-11	VIBRATOR, CRYSTAL (17.7344MHz)

****

⚠ 1-413-635-11 POWER BLOCK ASSY (SLV625UB)

****

⚠ 1-413-636-11 POWER BLOCK ASSY (SLV625VP)

****

⚠ 1-413-637-11 POWER BLOCK ASSY (SLV625/NC/NP)

****

(Ref. No. 8,000 Series)

< CAPACITOR >

Ref. No.	Part No.	Description				Remark
C115	1-130-495-00	MYLAR	0.1uF		50V	
C201	1-124-122-11	ELECT	100uF		50V	
C204	1-126-301-11	ELECT	1uF	20%	50V	
C206	1-126-101-11	ELECT	100uF		16V	
C207	1-126-101-11	ELECT	100uF		16V	
C208	1-124-893-11	ELECT	2200uF		10V	
C209	1-124-443-00	ELECT	100uF		10V	
C211	1-124-443-00	ELECT	100uF		10V	
C212	1-124-122-11	ELECT	100uF		50V	
C213	1-124-471-00	ELECT	1000uF		6.3V	
C218	1-124-443-00	ELECT	100uF		10V	

< CONNECTOR >

Ref. No.	Part No.	Description
CN711	1-506-473-11	CONNECTOR 8P
CN712	1-506-474-11	CONNECTOR 9P

< DIODE >

Ref. No.	Part No.	Description	
⚠ D101	9-900-511-01	DIODE	S1WBA60
D102	8-719-948-45	DIODE	ERA22-08
D103	8-719-948-45	DIODE	ERA22-08

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indication parts by reference number, please include the board name.

Ref. No.	Part No.	Description		Remark
D104	8-719-200-82	DIODE	11ES2	
D105	8-719-109-63	DIODE	RD3.0EB2	
D106	8-719-911-19	DIODE	1SS119	
D201	9-900-534-01	DIODE	ERA18-02	
D202	8-719-114-55	DIODE	RD9.1JSB	
D203	8-719-311-30	DIODE	RL4Z	
D204	9-998-861-01	DIODE	ERA83-004	
D205	8-719-981-00	DIODE	ERC81-004	
D207	9-900-534-01	DIODE	ERA18-02	
D208	9-998-861-01	DIODE	ERA83-004	
		< FUSE >		
⚠F101	1-532-203-00	FUSE 250V 2A		
		< IC >		
⚠IC201	9-900-530-01	IC	AN7809F	
⚠IC202	8-759-420-19	IC	AN1431T	
⚠IC203	8-759-420-19	IC	AN1431T	
⚠IC204	8-759-420-19	IC	AN1431T	
		< COIL >		
L201	9-901-974-01	CHOCK COIL 10uH		
		< COUPLER >		
PC101	8-719-939-00	COUPLER, PHOTO	PC111S	
		< TRANSISTOR >		
⚠Q101	8-729-204-94	TRANSISTOR	2SC3559	
⚠Q102	8-729-142-46	TRANSISTOR	2SC2001-L	
⚠Q201	9-901-973-01	TRANSISTOR	2SC4545	
Q202	9-901-973-01	TRANSISTOR	2SC4545	
⚠Q203	8-729-993-42	TRANSISTOR	2SA934-Q	
⚠Q204	8-729-201-53	TRANSISTOR	2SA1015-GR	
Q205	8-729-900-80	TRANSISTOR	DTC114ES	
		< RESISTOR >		
⚠R101	1-202-719-00	SLOID	1M	1/2W
R103	1-247-883-00	CARBON	150K	1/4W
R104	1-247-883-00	CARBON	150K	1/4W
R105	1-247-883-00	CARBON	150K	1/4W
R106	1-249-441-11	CARBON	100K	1/4W
R107	1-249-441-11	CARBON	100K	1/4W
⚠R109	1-215-928-11	METAL	68K	3W
R111	1-247-828-00	CARBON	750	1/4W
R112	1-249-397-11	CARBON	22	1/4W
R201	1-249-421-11	CARBON	2.2K	1/4W
R202	1-249-414-11	CARBON	560	1/4W

Ref. No.	Part No.	Description		Remark
R203	1-249-405-11	CARBON	100	1/4W
R204	1-249-405-11	CARBON	100	1/4W
R206	1-249-425-11	CARBON	4.7K	1/4W
R207	1-247-834-11	CARBON	1.3K	1/4W
R210	1-215-425-00	METAL	1.5K	1/4W
R211	1-249-414-11	CARBON	560	1/4W
R212	1-215-425-00	METAL	1.5K	1/4W
R213	1-249-405-11	CARBON	100	1/4W
R214	1-249-405-11	CARBON	100	1/4W
R215	1-215-425-00	METAL	1.5K	1/4W
R216	1-249-409-11	CARBON	220	1/4W
R217	1-215-425-00	METAL	1.5K	1/4W
⚠R218	1-212-934-00	FUSE	1	1/2W
R219	1-249-429-11	CARBON	10K	1/4W
R220	1-249-413-11	CARBON	470	1/4W
R221	1-249-413-11	CARBON	470	1/4W
R222	1-249-417-11	CARBON	1K	1/4W
R223	1-249-417-11	CARBON	1K	1/4W
		< VARIABLE RESISTOR >		
RV201	9-901-975-01	RES, ADJ, CARBON 1K		
		< THYRISTOR >		
⚠SCR201	9-901-972-01	THYRISTOR 2P4M		
		< TRANS >		
⚠T101	9-901-971-01	TRANS, CONVERTER		

****

A-6727-353-A RP-63 BOARD, COMPLETE

****

(Ref.No. 1,000 Series)

< CAPACITOR >

C101	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C102	1-124-242-00	ELECT	33uF	20%	25V
C103	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C104	1-126-301-11	ELECT	1uF	20%	50V
C106	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C107	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C108	1-124-455-00	ELECT	100uF	20%	16V
C109	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C110	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C111	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C112	1-126-157-11	ELECT	10uF	20%	16V
C113	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C114	1-126-301-11	ELECT	1uF	20%	50V
C115	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C116	1-163-113-00	CERAMIC CHIP	68PF	5%	50V

When indication parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

RP-63

Ref. No.	Part No.	Description			Remark
C117	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C118	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C119	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C120	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C121	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C122	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C123	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C801	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C802	1-126-154-11	ELECT	47uF	20%	6.3V
C803	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C804	1-124-464-11	ELECT	0.22uF	20%	50V
C805	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C806	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C807	1-124-464-11	ELECT	0.22uF	20%	50V
C808	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C809	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C810	1-124-464-11	ELECT	0.22uF	20%	50V
C811	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C812	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C813	1-124-464-11	ELECT	0.22uF	20%	50V
C814	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C815	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C816	1-124-463-00	ELECT	0.1uF	20%	50V
C817	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C818	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C819	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C820	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C821	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C822	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C823	1-163-107-00	CERAMIC CHIP	39PF	5%	50V
C824	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C825	1-163-115-00	CERAMIC CHIP	82PF	5%	50V
C826	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C827	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C828	1-126-154-11	ELECT	47uF	20%	6.3V
C829	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C831	1-126-154-11	ELECT	47uF	20%	6.3V
C832	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C833	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C834	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C835	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C836	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C838	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
		< CONNECTOR >			
CN101	1-506-487-11	CONNECTOR 8P, MALE			
CN801	1-565-759-11	CONNECTOR, BOARD TO BOARD 13P			
CN802	1-506-490-21	PIN, CONNECTOR 11P			
CN803	1-506-486-11	PIN, CONNECTOR 7P			

Ref. No.	Part No.	Description			Remark
* CN804	1-564-031-00	PIN, CONNECTOR 6P			
		< DIODE >			
D102	8-719-400-18	DIODE	MA152WK		
D801	8-719-400-18	DIODE	MA152WK		
D802	8-719-400-18	DIODE	MA152WK		
D803	8-719-400-18	DIODE	MA152WK		
		< IC >			
IC101	8-759-320-55	IC	HA12115MP		
IC801	8-759-320-52	IC	HA118019NT		
		< COIL >			
L101	1-408-982-11	INDUCTOR	100uH		
L102	1-408-982-11	INDUCTOR	100uH		
L801	1-408-982-11	INDUCTOR	100uH		
L802	1-408-975-21	INDUCTOR	27uH		
L803	1-408-970-21	INDUCTOR	10uH		
L804	1-408-985-21	INDUCTOR	180uH		
L805	1-408-982-11	INDUCTOR	100uH		
L806	1-408-982-11	INDUCTOR	100uH		
L807	1-408-977-21	INDUCTOR	39uH		
L808	1-408-973-21	INDUCTOR	18uH		
L809	1-408-973-21	INDUCTOR	18uH		
		< TRANSISTOR >			
Q101	8-729-216-22	TRANSISTOR	2SA1162-G		
Q801	8-729-216-22	TRANSISTOR	2SA1162-G		
Q802	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q803	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q805	8-729-901-01	TRANSISTOR	DTC144EK		
Q806	8-729-901-01	TRANSISTOR	DTC144EK		
Q850	8-729-301-98	TRANSISTOR	2SB1000A-L		
Q851	8-729-901-01	TRANSISTOR	DTC144EK		
		< RESISTOR >			
R101	1-216-019-00	METAL CHIP	56	5%	1/10W
R102	1-216-003-11	METAL GLAZE	12	5%	1/10W
R104	1-216-079-00	METAL CHIP	18K	5%	1/10W
R105	1-216-304-11	METAL CHIP	3.3	5%	1/10W
R106	1-216-073-00	METAL CHIP	10K	5%	1/10W
R107	1-216-304-11	METAL CHIP	3.3	5%	1/10W
R108	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R110	1-216-295-00	METAL CHIP	0	5%	1/10W
R111	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R124	1-216-295-00	METAL CHIP	0	5%	1/10W
R140	1-216-295-00	METAL CHIP	0	5%	1/10W
R141	1-216-011-00	METAL CHIP	27	5%	1/10W

When indication parts by reference number, please include the board name.

Ref. No.	Part No.	Description			Remark
R801	1-216-025-00	METAL CHIP	100	5%	1/10W
R802	1-216-025-00	METAL CHIP	100	5%	1/10W
R803	1-216-021-00	METAL CHIP	68	5%	1/10W
R804	1-216-025-00	METAL CHIP	100	5%	1/10W
R805	1-216-081-00	METAL CHIP	22K	5%	1/10W
R806	1-216-113-00	METAL CHIP	470K	5%	1/10W
R807	1-216-073-00	METAL CHIP	10K	5%	1/10W
R808	1-216-073-00	METAL CHIP	10K	5%	1/10W
R809	1-216-081-00	METAL CHIP	22K	5%	1/10W
R810	1-216-073-00	METAL CHIP	10K	5%	1/10W
R811	1-216-049-00	METAL CHIP	1K	5%	1/10W
R812	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R813	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R814	1-216-039-00	METAL CHIP	390	5%	1/10W
R815	1-216-039-00	METAL CHIP	390	5%	1/10W
R816	1-216-047-00	METAL CHIP	820	5%	1/10W
R817	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R818	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R819	1-216-041-00	METAL CHIP	470	5%	1/10W
R820	1-216-045-00	METAL CHIP	680	5%	1/10W
R821	1-216-043-00	METAL CHIP	560	5%	1/10W
R823	1-216-047-00	METAL CHIP	820	5%	1/10W
R824	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R826	1-216-109-00	METAL CHIP	330K	5%	1/10W
R827	1-216-049-00	METAL CHIP	1K	5%	1/10W
R828	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R829	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R830	1-216-073-00	METAL CHIP	10K	5%	1/10W
R831	1-216-073-00	METAL CHIP	10K	5%	1/10W
R832	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R833	1-216-049-00	METAL CHIP	1K	5%	1/10W
R850	1-216-067-00	METAL CHIP	5.6K	5%	1/10W

< SWITCH >

SW801 1-570-856-11 SWITCH, SLIDE

****

* A-6712-490-A SS-147 BOARD, COMPLETE (SLV-625/NC/NP/UB)

****

* A-6712-489-A SS-147 BOARD, COMPLETE (SLV-625VP)

****

(Ref. No. 1,000 Series)

< CAPACITOR >

Ref. No.	Part No.	Description				Remark
C303	1-161-021-11	CERAMIC	0.047uF	10%	25V	(SLV-625VP)
C304	1-161-021-11	CERAMIC	0.047uF	10%	25V	(SLV-625VP)
C305	1-161-772-11	CERAMIC	0.1uF	10%	25V	(SLV-625VP)
C306	1-161-057-00	CERAMIC	0.033uF	10%	50V	(SLV-625VP)
C307	1-164-075-11	CERAMIC	150PF	10%	50V	(SLV-625VP)
C501	1-124-234-00	ELECT	22uF	20%	16V	
C502	1-161-051-00	CERAMIC	0.01uF	10%	50V	
C503	1-130-491-00	MYLAR	0.047uF	5%	50V	
C504	1-130-487-00	MYLAR	0.022uF	5%	50V	
C505	1-126-157-11	ELECT	10uF	20%	16V	
C506	1-164-096-11	CERAMIC	0.01uF		50V	
C551	1-164-096-11	CERAMIC	0.01uF		50V	
C552	1-164-058-11	CERAMIC	33PF	5%	50V	
C553	1-164-081-11	CERAMIC	470PF	10%	50V	
C554	1-164-056-11	CERAMIC	27PF	5%	50V	
C555	1-164-096-11	CERAMIC	0.01uF		50V	
C556	1-161-772-11	CERAMIC	0.1uF	10%	25V	
C558	1-126-154-11	ELECT	47uF	20%	6.3V	

< CONNECTOR >

CN301	1-568-920-11	CONNECTOR, BOARD TO BOARD 9P	(SLV-625VP)
* CN501	1-566-706-11	CONNECTOR, BOARD TO BOARD 12P	

< DIODE >

D301	8-719-974-59	DIODE	1SR139-100	(SLV-625VP)
D501	8-719-109-85	DIODE	RD5.1ES-B2	
D552	8-719-921-37	DIODE	MTZJ-4.7	

< IC >

IC301	8-759-030-60	IC	SDA5642	(SLV-625VP)
IC302	8-759-147-30	IC	uPD75004GB-VSX182	(SLV-625VP)
IC501	8-759-503-91	IC	TL082ACP	
IC502	8-759-008-70	IC	LM358N	

< COIL >

L301	1-408-409-00	INDUCTOR	10uH	(SLV-625VP)
L501	1-408-409-00	INDUCTOR	10uH	
L551	1-408-413-00	INDUCTOR	22uH	
L552	1-408-413-00	INDUCTOR	22uH	

< TRANSISTOR >

Q551	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q552	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q553	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q558	8-729-119-78	TRANSISTOR	2SC2785-HFE

< RESISTOR >

R301	1-249-421-11	CARBON	2.2K	5%	1/4W	(SLV-625VP)
R302	1-247-903-00	CARBON	1M	5%	1/4W	(SLV-625VP)
R303	1-249-441-11	CARBON	100K	5%	1/4W	(SLV-625VP)
R304	1-247-901-11	CARBON	820K	5%	1/4W	(SLV-625VP)
R305	1-249-405-11	CARBON	100	5%	1/4W	(SLV-625VP)
R306	1-247-901-11	CARBON	820K	5%	1/4W	(SLV-625VP)
R307	1-249-426-11	CARBON	5.6K	5%	1/4W	(SLV-625VP)

When indication parts by reference number, please include the board name.

SS-147 YC-122

Ref. No.	Part No.	Description			Remark
R308	1-249-429-11	CARBON	10K	5%	1/4W(SLV-625VP)
R309	1-249-429-11	CARBON	10K	5%	1/4W(SLV-625VP)
R310	1-249-429-11	CARBON	10K	5%	1/4W(SLV-625VP)
R311	1-249-429-11	CARBON	10K	5%	1/4W(SLV-625VP)
R312	1-249-429-11	CARBON	10K	5%	1/4W(SLV-625VP)
R501	1-249-432-11	CARBON	18K	5%	1/4W
R503	1-247-885-00	CARBON	180K	5%	1/4W
R504	1-249-436-11	CARBON	39K	5%	1/4W
R505	1-249-417-11	CARBON	1K	5%	1/4W
R506	1-249-429-11	CARBON	10K	5%	1/4W
R507	1-249-429-11	CARBON	10K	5%	1/4W
R551	1-249-431-11	CARBON	15K	5%	1/4W
R552	1-249-430-11	CARBON	12K	5%	1/4W
R553	1-249-417-11	CARBON	1K	5%	1/4W
R554	1-249-418-11	CARBON	1.2K	5%	1/4W
R555	1-249-417-11	CARBON	1K	5%	1/4W
R556	1-249-417-11	CARBON	1K	5%	1/4W
R557	1-247-897-11	CARBON	560K	5%	1/4W
R558	1-249-421-11	CARBON	2.2K	5%	1/4W
R559	1-249-421-11	CARBON	2.2K	5%	1/4W
R560	1-249-428-11	CARBON	8.2K	5%	1/4W
R561	1-249-405-11	CARBON	100	5%	1/4W
R562	1-249-412-11	CARBON	390	5%	1/4W
R563	1-249-437-11	CARBON	47K	5%	1/4W
R564	1-249-427-11	CARBON	6.8K	5%	1/4W
R565	1-249-435-11	CARBON	33K	5%	1/4W
R566	1-249-429-11	CARBON	10K	5%	1/4W
R567	1-249-429-11	CARBON	10K	5%	1/4W
R568	1-249-405-11	CARBON	100	5%	1/4W
R578	1-249-435-11	CARBON	33K	5%	1/4W
R579	1-249-434-11	CARBON	27K	5%	1/4W
R582	1-249-417-11	CARBON	1K	5%	1/4W

< CRYSTAL >

Ref. No.	Part No.	Description
X301	1-577-101-11	VIBRATOR, CERAMIC (4.19MHz)(SLV-625VP)

****

* A-6727-408-A YC-122 BOARD, COMPLETE(SLV-625/NC/NP/UB)

****

* A-6727-455-A YC-122 BOARD, COMPLETE (SLV-625VP)

****

(Ref. No. 2,000 Series)

* 3-738-015-01 COVER, (DIA. 6) CARBON VR

< CAPACITOR >

Ref. No.	Part No.	Description			Remark
C701	1-164-092-11	CERAMIC	0.0033uF	10%	25V
C702	1-164-096-11	CERAMIC	0.01uF		50V
C703	1-124-927-11	ELECT	4.7uF	20%	100V
C704	1-124-598-11	ELECT	22uF	20%	25V
C705	1-162-851-11	CERAMIC	0.1uF	10%	16V
C706	1-124-927-11	ELECT	4.7uF	20%	100V
C707	1-124-927-11	ELECT	4.7uF	20%	100V
C708	1-164-046-11	CERAMIC	10PF	0.5PF	50V
C709	1-124-443-00	ELECT	100uF	20%	10V
C710	1-164-098-11	CERAMIC	0.047uF		12V
C711	1-102-820-00	CERAMIC	330PF	5%	50V
C712	1-102-822-00	CERAMIC	390PF	5%	50V
C713	1-164-084-11	CERAMIC	820PF	10%	50V
C714	1-164-096-11	CERAMIC	0.01uF		50V
C715	1-164-096-11	CERAMIC	0.01uF		50V
C716	1-162-851-11	CERAMIC	0.1uF	10%	16V
C718	1-124-927-11	ELECT	4.7uF	20%	100V
C723	1-164-096-11	CERAMIC	0.01uF		50V
C724	1-164-097-11	CERAMIC	0.022uF		50V
C725	1-164-096-11	CERAMIC	0.01uF		50V
C726	1-164-096-11	CERAMIC	0.01uF		50V
C727	1-164-096-11	CERAMIC	0.01uF		50V
C728	1-164-060-11	CERAMIC	39PF	5%	50V
C730	1-164-096-11	CERAMIC	0.01uF		50V
C731	1-124-443-00	ELECT	100uF	20%	10V
C732	1-164-068-11	CERAMIC	82PF	5%	50V
C733	1-164-058-11	CERAMIC	33PF	5%	50V
C734	1-102-824-00	CERAMIC	470PF	5%	50V
C735	1-162-851-11	CERAMIC	0.1uF	10%	16V
C736	1-164-066-11	CERAMIC	68PF	5%	50V
C737	1-164-096-11	CERAMIC	0.01uF		50V
C738	1-124-925-11	ELECT	2.2uF	20%	100V
C739	1-164-072-11	CERAMIC	120PF	5%	50V
C741	1-124-126-00	ELECT	47uF	20%	10V
C743	1-162-851-11	CERAMIC	0.1uF	10%	16V
C744	1-124-589-11	ELECT	47uF	20%	16V
C746	1-164-096-11	CERAMIC	0.01uF		50V
C747	1-162-851-11	CERAMIC	0.1uF	10%	16V
C749	1-162-851-11	CERAMIC	0.1uF	10%	16V
C750	1-164-096-11	CERAMIC	0.01uF		50V
C751	1-162-851-11	CERAMIC	0.1uF	10%	16V
C753	1-124-126-00	ELECT	47uF	20%	10V
C754	1-164-058-11	CERAMIC	33PF	5%	50V
C755	1-164-072-11	CERAMIC	120PF	5%	50V
C756	1-102-978-00	CERAMIC	220PF	5%	50V
C763	1-124-927-11	ELECT	4.7uF	20%	100V
C770	1-102-978-00	CERAMIC	220PF	5%	50V
C773	1-162-839-11	CERAMIC	0.01uF	10%	16V
C780	1-162-851-11	CERAMIC	0.1uF	10%	16V
C782	1-164-066-11	CERAMIC	68PF	5%	50V
C783	1-102-8,0-00	CERAMIC	330PF	5%	50V(SLV-625/NC/NP/UB)
C783	1-102-822-00	CERAMIC	390PF	5%	50V (SLV-625VP)

When indication parts by reference
number, please include the board name.

Ref. No.	Part No.	Description			Remark
C785	1-164-096-11	CERAMIC	0.01uF		50V
C790	1-162-851-11	CERAMIC	0.1uF	10%	16V
C791	1-164-050-11	CERAMIC	15PF	5%	50V
C792	1-164-096-11	CERAMIC	0.01uF		50V
C801	1-162-851-11	CERAMIC	0.1uF	10%	16V
C802	1-124-442-00	ELECT	330uF	20%	6.3V
C803	1-164-096-11	CERAMIC	0.01uF		50V
C804	1-162-851-11	CERAMIC	0.1uF	10%	16V
C805	1-164-097-11	CERAMIC	0.022uF		50V
C806	1-164-096-11	CERAMIC	0.01uF		50V
C807	1-164-096-11	CERAMIC	0.01uF		50V
C808	1-164-096-11	CERAMIC	0.01uF		50V
C809	1-102-978-00	CERAMIC	220PF	5%	50V
C810	1-102-978-00	CERAMIC	220PF	5%	50V
C811	1-164-031-11	CERAMIC	33PF	5%	50V
C812	1-164-096-11	CERAMIC	0.01uF		50V
C813	1-124-443-00	ELECT	100uF	20%	10V
C814	1-126-177-11	ELECT	100uF	20%	10V
C815	1-130-499-00	MYLAR	0.22uF	5%	50V
C816	1-126-163-11	ELECT	4.7uF	20%	50V
C817	1-164-096-11	CERAMIC	0.01uF		50V
C818	1-161-061-11	CERAMIC	0.068uF	10%	50V
C819	1-130-497-00	MYLAR	0.15uF	5%	50V
C820	1-164-070-11	CERAMIC	100PF	5%	50V
C823	1-126-163-11	ELECT	4.7uF	20%	50V
C825	1-130-495-00	MYLAR	0.1uF	5%	50V
C826	1-164-098-11	CERAMIC	0.047uF		12V
C827	1-124-252-00	ELECT	0.33uF	20%	50V
C829	1-164-096-11	CERAMIC	0.01uF		50V
C830	1-162-851-11	CERAMIC	0.1uF	10%	16V
C831	1-101-361-00	CERAMIC	150PF	5%	50V
C832	1-126-301-11	ELECT	1uF	20%	50V
C833	1-164-096-11	CERAMIC	0.01uF		50V
C834	1-126-162-11	ELECT	3.3uF	20%	50V
C835	1-162-851-11	CERAMIC	0.1uF	10%	16V
C836	1-162-851-11	CERAMIC	0.1uF	10%	16V
C837	1-164-052-11	CERAMIC	18PF	5%	50V
C838	1-124-589-11	ELECT	47uF	20%	16V
C839	1-164-096-11	CERAMIC	0.01uF		50V
C840	1-164-096-11	CERAMIC	0.01uF		50V
C841	1-164-096-11	CERAMIC	0.01uF		50V (SLV-625VP)
C842	1-164-096-11	CERAMIC	0.01uF		50V
C863	1-162-851-11	CERAMIC	0.1uF	10%	16V
C865	1-162-851-11	CERAMIC	0.1uF	10%	16V
		< CONNECTOR >			
CN703	1-506-471-11	CONNECTOR 6P, MALE			
CN704	1-506-476-11	CONNECTOR 11P, MALE			
CN705	1-563-599-11	CONNECTOR, FLEXIBLE 22P			
CN708	1-506-472-11	CONNECTOR 7P, MALE			
		< DIODE >			
D701	8-719-911-19	DIODE	1SS119		
D705	8-719-911-19	DIODE	1SS119		
D801	8-719-911-19	DIODE	1SS119		
		< DELAY LINE >			
DL801	1-415-602-11	DELAY LINE, GLASS			
		< FILTER >			
FL701	1-236-312-11	FILTER, BAND PASS			
FL801	1-239-915-11	FILTER, BAND PASS (5.06MHz)			
FL802	1-236-311-11	FILTER, BAND PASS (13.3MHz)			
FL803	1-527-849-00	FILTER, CERAMIC			
		< IC >			
IC701	8-759-420-07	IC	AN3231K		
IC702	8-752-321-89	IC	CXL5003P		
IC801	8-759-320-78	IC	HA118016NT		
IC802	8-759-822-05	IC	LA7213		
		< COIL >			
L701	1-410-509-11	INDUCTOR	10uH		
L704	1-408-420-00	INDUCTOR	82uH		
L705	1-408-424-00	INDUCTOR	180uH		
L706	1-408-421-00	INDUCTOR	100uH		
L707	1-408-421-00	INDUCTOR	100uH		
L708	1-408-421-00	INDUCTOR	100uH		
L709	1-408-421-00	INDUCTOR	100uH		
L712	1-408-410-00	INDUCTOR	12uH		
L713	1-408-413-00	INDUCTOR	22uH		
L726	1-408-424-00	INDUCTOR	180uH		
L801	1-408-421-00	INDUCTOR	100uH		
L802	1-408-427-00	INDUCTOR	330uH		
L803	1-408-429-00	INDUCTOR	470uH		
L805	1-408-409-00	INDUCTOR	10uH		
L806	1-408-408-00	INDUCTOR	8.2uH		
L807	1-408-408-00	INDUCTOR	8.2uH		
L809	1-407-499-00	INDUCTOR	3.9mH		
		< TRANSISTOR >			
Q702	8-729-119-76	TRANSISTOR	2SA1175-HFE		
Q704	8-729-900-89	TRANSISTOR	DTC144ES		
Q705	8-729-119-78	TRANSISTOR	2SC2785-HFE		
Q706	8-729-119-76	TRANSISTOR	2SA1175-HFE		
Q711	8-729-119-76	TRANSISTOR	2SA1175-HFE		

When indication parts by reference number, please include the board name.

YC-122

Ref. No.	Part No.	Description	Remark
Q721	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q722	8-729-900-89	TRANSISTOR DTC144ES	
Q723	8-729-900-89	TRANSISTOR DTC144ES	
Q801	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q802	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q803	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q804	8-729-900-80	TRANSISTOR DTC114ES	
Q805	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q806	8-729-900-89	TRANSISTOR DTC144ES	
Q807	8-729-119-78	TRANSISTOR 2SC2785-HFE (SLV-625VP)	
Q808	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q809	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q810	8-729-900-65	TRANSISTOR DTA144ES	
Q821	8-729-823-11	TRANSISTOR 2SC2999C, D, E	
Q855	8-729-900-89	TRANSISTOR DTC144ES (SLV-625VP)	
Q871	8-729-903-02	TRANSISTOR DTA143XS	
		< RESISTOR >	
R701	1-247-891-00	CARBON 330K 5% 1/4W	
R702	1-249-421-11	CARBON 2.2K 5% 1/4W	
R703	1-249-428-11	CARBON 8.2K 5% 1/4W	
R704	1-249-427-11	CARBON 6.8K 5% 1/4W	
R705	1-249-426-11	CARBON 5.6K 5% 1/4W	
R706	1-249-421-11	CARBON 2.2K 5% 1/4W	
R707	1-247-834-11	CARBON 1.3K 5% 1/4W	
R708	1-247-818-11	CARBON 300 5% 1/4W	
R709	1-249-423-11	CARBON 3.3K 5% 1/4W	
R710	1-249-438-11	CARBON 56K 5% 1/4W	
R712	1-249-425-11	CARBON 4.7K 5% 1/4W	
R713	1-249-421-11	CARBON 2.2K 5% 1/4W	
R714	1-249-425-11	CARBON 4.7K 5% 1/4W	
R717	1-249-420-11	CARBON 1.8K 5% 1/4W	
R718	1-249-422-11	CARBON 2.7K 5% 1/4W	
R719	1-249-426-11	CARBON 5.6K 5% 1/4W	
R720	1-249-424-11	CARBON 3.9K 5% 1/4W	
R722	1-249-419-11	CARBON 1.5K 5% 1/4W	
R723	1-249-426-11	CARBON 5.6K 5% 1/4W	
R724	1-249-419-11	CARBON 1.5K 5% 1/4W	
R725	1-249-412-11	CARBON 390 5% 1/4W	
R726	1-249-416-11	CARBON 820 5% 1/4W	
R727	1-249-421-11	CARBON 2.2K 5% 1/4W	
R728	1-247-897-11	CARBON 560K 5% 1/4W	
R729	1-249-437-11	CARBON 47K 5% 1/4W	
R730	1-249-437-11	CARBON 47K 5% 1/4W	
R731	1-249-413-11	CARBON 470 5% 1/4W	
R734	1-249-434-11	CARBON 27K 5% 1/4W	
R735	1-249-429-11	CARBON 10K 5% 1/4W	
R736	1-249-409-11	CARBON 220 5% 1/4W	
R737	1-249-413-11	CARBON 470 5% 1/4W	
R738	1-249-405-11	CARBON 100 5% 1/4W	
R741	1-249-417-11	CARBON 1K 5% 1/4W	
R744	1-247-903-00	CARBON 1M 5% 1/4W	
R754	1-249-412-11	CARBON 390 5% 1/4W	
R755	1-259-880-11	CARBON 2.2M 5% 1/4W	
R761	1-249-437-11	CARBON 47K 5% 1/4W	
R763	1-249-423-11	CARBON 3.3K 5% 1/4W	
R773	1-249-417-11	CARBON 1K 5% 1/4W	
R774	1-249-435-11	CARBON 33K 5% 1/4W	
R775	1-249-435-11	CARBON 33K 5% 1/4W	
R777	1-249-417-11	CARBON 1K 5% 1/4W	
R778	1-249-418-11	CARBON 1.2K 5% 1/4W	
R779	1-249-413-11	CARBON 470 5% 1/4W	
R780	1-249-429-11	CARBON 10K 5% 1/4W	
R781	1-249-427-11	CARBON 6.8K 5% 1/4W	
R801	1-249-417-11	CARBON 1K 5% 1/4W	
R802	1-249-417-11	CARBON 1K 5% 1/4W	
R803	1-249-413-11	CARBON 470 5% 1/4W	
R805	1-249-433-11	CARBON 22K 5% 1/4W	
R806	1-249-435-11	CARBON 33K 5% 1/4W	
R807	1-249-417-11	CARBON 1K 5% 1/4W	
R808	1-249-418-11	CARBON 1.2K 5% 1/4W	
R809	1-249-417-11	CARBON 1K 5% 1/4W	
R810	1-249-415-11	CARBON 680 5% 1/4W	
R811	1-249-417-11	CARBON 1K 5% 1/4W	
R812	1-249-423-11	CARBON 3.3K 5% 1/4W	
R813	1-249-413-11	CARBON 470 5% 1/4W	
R814	1-249-415-11	CARBON 680 5% 1/4W	
R815	1-249-417-11	CARBON 1K 5% 1/4W	
R816	1-249-441-11	CARBON 100K 5% 1/4W	
R817	1-249-405-11	CARBON 100 5% 1/4W	
R818	1-249-412-11	CARBON 390 5% 1/4W	
R819	1-249-421-11	CARBON 2.2K 5% 1/4W	
R820	1-249-427-11	CARBON 6.8K 5% 1/4W	
R821	1-249-423-11	CARBON 3.3K 5% 1/4W	
R822	1-249-420-11	CARBON 1.8K 5% 1/4W	
R823	1-249-423-11	CARBON 3.3K 5% 1/4W	
R824	1-249-417-11	CARBON 1K 5% 1/4W	
R825	1-249-427-11	CARBON 6.8K 5% 1/4W(SLV-625VP)	
R826	1-249-422-11	CARBON 2.7K 5% 1/4W(SLV-625VP)	
R827	1-249-424-11	CARBON 3.9K 5% 1/4W(SLV-625VP)	
R828	1-249-410-11	CARBON 270 5% 1/4W	
R832	1-249-409-11	CARBON 220 5% 1/4W	
R833	1-249-411-11	CARBON 330 5% 1/4W	
R834	1-249-422-11	CARBON 2.7K 5% 1/4W	
R835	1-249-411-11	CARBON 330 5% 1/4W	
R836	1-249-411-11	CARBON 330 5% 1/4W	
R837	1-249-425-11	CARBON 4.7K 5% 1/4W	

When indication parts by reference number, please include the board name.

YC-122

Ref. No.	Part No.	Description	Remark
R838	1-249-437-11	CARBON 47K 5%	1/4W
R839	1-249-417-11	CARBON 1K 5%	1/4W
R855	1-249-411-11	CARBON 330 5%	1/4W
R856	1-247-887-00	CARBON 220K 5%	1/4W
R857	1-249-417-11	CARBON 1K 5%	1/4W
R858	1-249-435-11	CARBON 33K 5%	1/4W
R866	1-249-429-11	CARBON 10K 5%	1/4W
R869	1-249-429-11	CARBON 10K 5%	1/4W
R870	1-249-429-11	CARBON 10K 5%	1/4W
R871	1-249-429-11	CARBON 10K 5%	1/4W

< VARIABLE RESISTOR >

Ref. No.	Part No.	Description	Remark
RV701	1-238-015-11	RES, ADJ, CARBON 4.7K	
RV702	1-238-015-11	RES, ADJ, CARBON 4.7K	
RV703	1-238-016-11	RES, ADJ, CARBON 10K	
RV704	1-238-017-11	RES, ADJ, CARBON 22K	
RV705	1-238-017-11	RES, ADJ, CARBON 22K	
RV707	1-238-012-11	RES, ADJ, CARBON 1K	
RV708	1-238-016-11	RES, ADJ, CARBON 10K	
RV710	1-238-012-11	RES, ADJ, CARBON 1K	
RV801	1-238-012-11	RES, ADJ, CARBON 1K	

< CRYSTAL >

Ref. No.	Part No.	Description	Remark
X801	1-577-651-11	VIBRATOR, CRYSTAL (4.43MHz)	

****

MISCELLANEOUS
****

Ref. No.	Part No.	Description	Remark
1	1-466-579-61	SW BLOCK, CONTROL (SLV-625)	
1	1-466-579-71	SW BLOCK, CONTROL (SLV-625VP)	
1	1-466-579-81	SW BLOCK, CONTROL (SLV-625NC/UB)	
1	1-466-579-91	SW BLOCK, CONTROL (SLV-625NP)	
⚠59	1-413-635-11	POWER BLOCK (SLV-625UB)	
⚠59	1-413-636-11	POWER BLOCK (SLV-625VP)	
⚠59	1-413-637-11	POWER BLOCK (SLV-625/NC/NP)	
103	1-590-980-11	CABLE, FLEXIBLE (FYM-1)	
108	1-590-981-11	CABLE, FLEXIBLE (FCP-2) (SLV-625NP)	
161	1-506-482-11	CONNECTOR 3P, MALE	
260	1-543-647-11	HEAD, FE	
267	A-6761-129-A	HEAD BLOCK ASSY, ACE	
287	1-550-694-11	DRUM ASSY, ROTARY UPPER (DZR-43-R)	
M901	1-550-693-11	DRUM ASSY (DZH-43A-R)	
M902	8-835-394-11	MOTOR, DC U-26F (CAPSTAN)	
M903	X-3733-302-1	MOTOR ASSY, CAM	
M904	X-3727-784-1	MOTOR ASSY (LOADING)	
S1	1-692-062-11	SWITCH, ROTARY	
S901	1-572-662-11	SWITCH, ROTARY	

****

ACCESSORIES & PACKING MATERIALS
****

Ref. No.	Part No.	Description	Remark
	1-465-724-51	REMOTE COMMANDER (RMT-V118)	
	1-556-893-21	CORD ASSY, COAXIAL	
⚠	1-574-056-11	CORD, POWER (SLV-625VP)	
⚠	1-574-131-21	CORD, POWER SUPPLY (SLV-625/NC/NP)	
	1-575-334-11	CORD, CONNECTION	
⚠	1-590-865-11	CORD, POWER (SLV-625UB)	
	3-695-308-01	DRIVER, VOLUME	
	3-754-516-11	MANUAL, INSTRUCTION (ENGLISH)	(SLV-625UB)
	3-754-516-41	MANUAL, INSTRUCTION (ITALIAN, PORTUGUESE, DUTCH)	(SLV-625)
	3-754-516-51	MANUAL, INSTRUCTION (FRENCH, GERMAN, ITALIAN)	(SLV-625VP)
	3-754-516-61	MANUAL, INSTRUCTION (SWEDISH, FINNISH)	(SLV-625NC)
	3-754-516-71	MANUAL, INSTRUCTION (FRENCH, DUTCH)	(SLV-625NC)
	3-754-516-81	MANUAL, INSTRUCTION (SPANISH)	(SLV-625NP)
	3-942-852-01	CUSHION (UPPER)	
	3-942-853-01	CUSHION (LOWER)	
*	3-946-658-01	INDIVIDUAL CARTON	

****

HARDWARE LIST

#1	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3
#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3
#3	7-682-645-01	SCREW +PS 3X4
#4	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3
#5	7-682-548-04	SCREW +P 3X8
#6	7-682-547-04	SCREW +P 3X6
#7	7-628-254-00	SCREW +PS 2.6X5
#8	7-621-732-08	SET-SCT, HEX. 2X3 FLAT POINT
#9	7-621-773-95	SCREW +B 2.6X6

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

When indication parts by reference number, please include the board name.

SECTION 7
ELECTRICAL ADJUSTMENTS

During the adjustment, see the Parts Arrangement Diagram relevant to the adjustment on page 188.

7-1. PRE-ADJUSTMENT PREPARATIONS

Necessary items and indications for total adjustment of electric circuit of this machine will be described in this chapter.

7-1-1. Instruments to be Used

1) Color TV
2) Oscilloscope 1 or 2 phenomena, band more than 30 MHz, delay mode, as provided.
3) Frequency counter (min, 8 digits)
4) PAL pattern generator
5) Digital voltmeter
6) Audio level meter
7) Audio generator
8) Attenuator
9) Distortion factor meter
10) Voice multiple signal generator
11) Alignment tape
    Part code: H7099052H (MH-2)
12) HiFi alignment tape

7-1-2. Connection

Unless otherwise specified, connect and adjust the measuring instruments as shown in the following diagram.

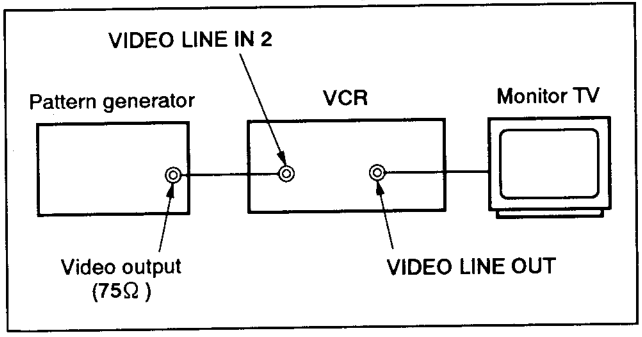

VIDEO LINE IN 2
Pattern generator
VCR
Monitor TV
Video output
(75Ω)
VIDEO LINE OUT

Fig. 7-1.

7-1-3. Setup for Adjustment

In this adjustment, PAL pattern generator is connected with LINE2 input signal terminal. When check to tuner, connected AERIAL terminal. Check that the amplitudes of video signal SYNC signal, of picture portions, and of burst signals are flat at approximately 0.3, 0.7 and 0.3V, respectively, and that the level ratio of the burst signal and "red" signal are 0.30:0.66. Fig. 7-2. shows video signals (color bars) used in adjusting the video section.

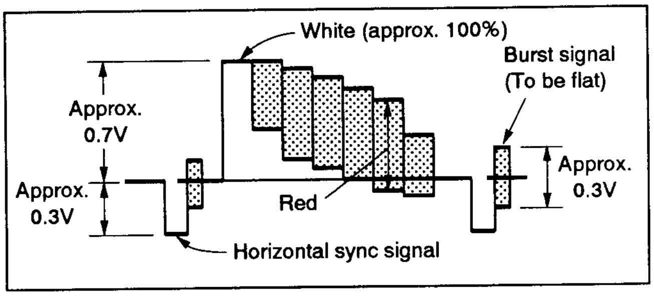

White (approx. 100%)
Burst signal
(To be flat)
Approx.
0.7V
Approx.
0.3V
Red
Approx.
0.3V
Horizontal sync signal

Fig. 7-2.

7-1-4. Alignment Tape(MH-2)

	Time	Video signal	Audio signal
1	10 min	Stair-step	6 kHz
2	5 min	———	3 kHz
3	10 min	Color bar	1 kHz
4	3 min	RF sweep	———

Table 7-1.

7-1-5. Specified I/O Level and Impedance

Input/output Terminal

Video inputs LINE IN 2 : phono jack
EURO-AV: 21-pin (Pin ⑳) 1 Vp-p, 75Ω, unbalanced, sync negative

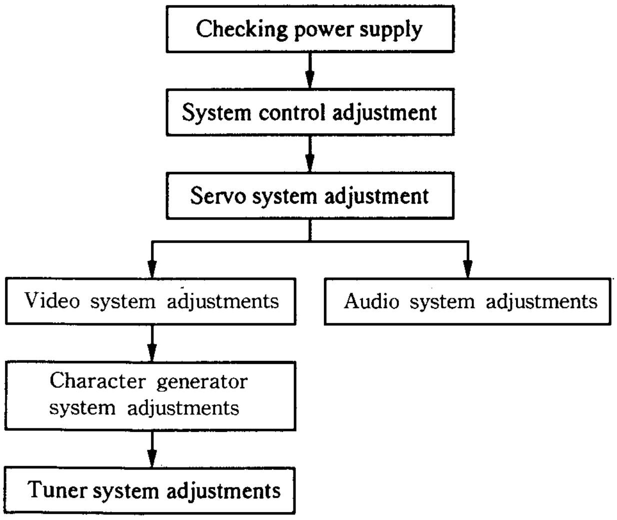
Audio inputs LINE IN 2 : phono jacks
47 kΩ, -7.5 dBs (0 dBs=0.775 Vrms)
EURO-AV: 21-pin (Pin ② and ⑥)
More than 10 kΩ, -4 dBs

Video outputs LINE OUT: phono jack
EURO-AV: 21-pin (Pin ⑲) 1 Vp-p, 75Ω, unbalanced sync negative

Audio outputs LINE OUT: phono jacks
-7.5 dBs at load impedance 47 kΩ
Output impedance: less than 10 kΩ
EURO-AV: 21-pin (Pins ① and ③)
Output impedance: less than 1 kΩ
-4 dBs with 10 kΩ load

7-1-6. Adjusting Sequence

Make the electrical adjustment in the following sequence.


Checking power supply
System control adjustment
Servo system adjustment
Video system adjustments
Audio system adjustments
Character generator system adjustments
Tuner system adjustments

7-2. POWER SUPPLY CHECK (POWER BLOCK)

Mode	E-E
Measuring Instrument	Digital voltmeter
UNSW 12V check	
Measurement Point	Pin ⑥ of CN712
Specified Value	12.0±0.1Vdc
DC 35V check	
Measurement Point	Pin ③ of CN711
Specified Value	35.0±1.0Vdc
SWD 5V	
Measurement Point	Pin ⑥ of CN711
Specified Value	5.0±0.1Vdc
SWD 9V	
Measurement Point	Pin ⑦ of CN711
Specified Value	9.0±0.1Vdc

Checking method:

1) Confirm that each voltage meets its specified value.

POWER BLOCK (Conductor side)

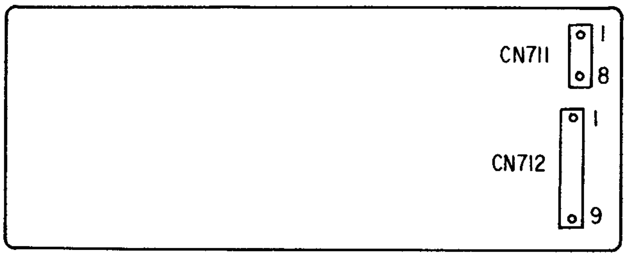

CN711
1
8
CN712
1
9

Fig. 7-3

7-3. SYSTEM CONTROL ADJUSTMENT

7-3-1. Clock Oscillation Frequency Check (MA-138 Board)

Mode	E-E
Signal	No signal
Measurement Point	Pin ㊷ of CN101
Measuring Instrument	Frequency counter
Specified Value	12.0±0.1MHz

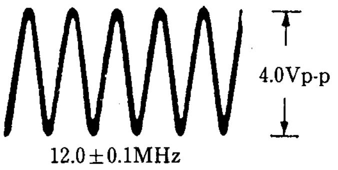

4.0Vp-p
12.0±0.1MHz

Fig. 7-4.

7-4. SERVO SYSTEM ADJUSTMENT

7-4-1. Switching Position Adjustment (MA-138 Board)

Mode	PB
Signal	Alignment tape: SP stair-step section
Measurement Point	CH1: Pin (B3) of CN442 CH2: Pin ⑤ of CN804(RF SWP) (RP-63 board)
Measuring Instrument	Oscilloscope
Adjusting Element	RV102
Specified Value	6.5 ± 0.5H (416 ± 32 μsec)

Adjusting method:

1) Once set to STOP mode, then to PB mode.
2) Check that the switching position is 6.5 ± 0.5H. (416 ± 32 μsec)
   If not meet the specified value, turn RV102 and repeat steps 1) to 2).

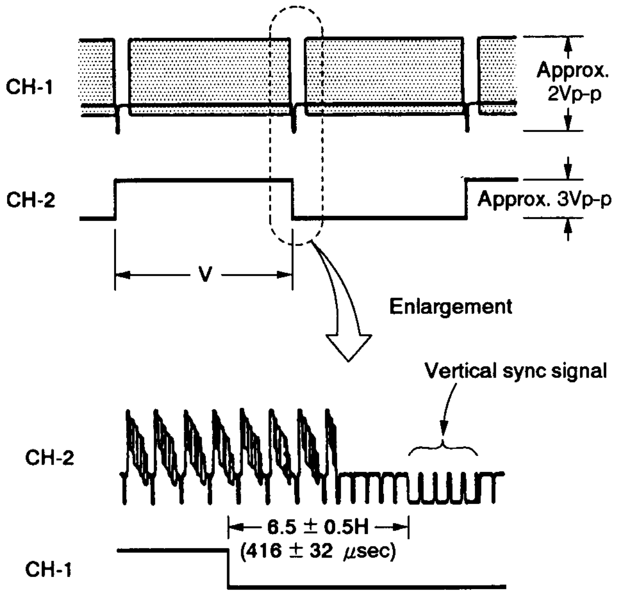

CH-1
Approx. 2Vp-p
CH-2
Approx. 3Vp-p
V
Enlargement
Vertical sync signal
CH-2
6.5 ± 0.5H
(416 ± 32 μsec)
CH-1

Fig. 7-5.

7-5. VIDEO SYSTEM ADJUSTMENTS

Adjust the video system in the following sequence as a rule. The color video signal supplied from the pattern generator is used as a video input signal for video system adjustment in the recording mode.
Make sure that sync and color burst signals meet requirements specified at setup of adjustment shown in Fig. 7-2.

[Adjusting sequence]

7-5-1. Playback Y Signal Level Adjustment
7-5-2. Y Signal NR Level Adjustment
7-5-3. Sync AGC Adjustment
7-5-4. Sync Tip Carrier Set and Deviation Adjustments
7-5-5. White Clip, Dark Clip Adjustment
7-5-6. Recording Y Signal Level Adjustment
7-5-7. Recording Chroma Level Adjustment

7-5-1. Playback Y Signal Level Adjustment (YC-122 Board)

Mode	PB
Signal	Alignment tape: SP color bar section
Measurement Point	VIDEO LINE OUT terminal
Measuring Instrument	Oscilloscope
Adjusting Element	RV708
Specified Value	1.00 ± 0.05 Vp-p

Note: 1) Make this adjustment with the EDIT ON/OFF button set to off.
2) VIDEO LINE OUT terminal must be terminated at 75Ω ± 1%.

Adjusting method:
1) With RV708, adjust the VIDEO signal level to 1.00 ± 0.05 Vp-p.

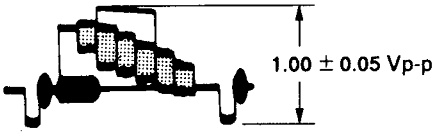


Fig. 7-6.

7-5-2. Y Signal NR Level Adjustment (YC-122 Board)

Mode	PB
Signal	Alignment tape: SP color bar section
Measurement Point	Pin ⑩ of IC701
Measuring Instrument	Oscilloscope
Adjusting Element	RV707
Specified Value	Less than 30mVp-p

Adjusting method:
1) Adjust to eliminate level differences for each H step with RV707.

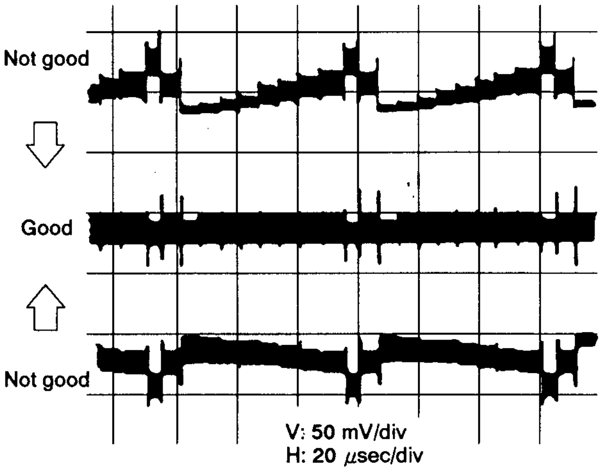


Fig. 7-7.

7-5-3. Sync AGC Adjustmnet (YC-122 Board)

Mode	E-E
Signal	Color bar
Measurement Point	VIDEO LINE OUT terminal
Measuring Instrument	Oscilloscope
Adjusting Element	RV701
Specified Value	1.00 ± 0.05 Vp-p

Note: VIDEO LINE OUT terminal must be terminates at 75Ω .

Adjusting method:
1) With RV701, adjust the VIDEO signal level to 1.00 ± 0.05 Vp-p.

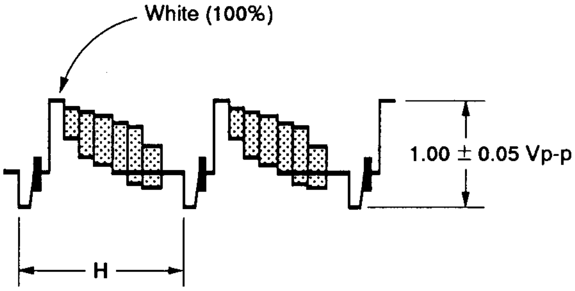


Fig. 7-8. SYNC AGC adjustment

7-5-4. Sync Tip Carrier Set and Deviation Adjustments (YC-122 Board)

Before starting the adjustment, be sure to check that recording Y signal level adjustment has been completed.

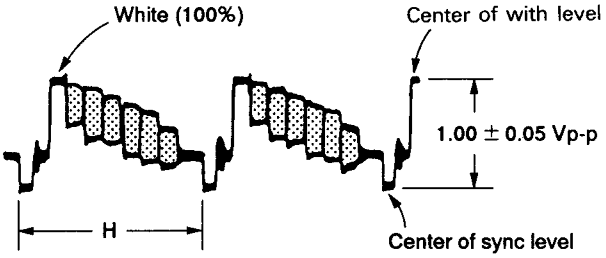
Sync tip carrier set	
Mode	E-E
Signal	No signal (Note 2)
Measurement Point	Pin ㉔ of IC701
Measuring Instrument	Frequency counter
Adjusting Element	RV703
Specified Value	3.80 ± 0.05 MHz
Deviation adjustment	
Mode	REC and PB
Signal	Color bar
Measurement Point	VIDEO LINE OUT terminal
Measuring Instrument	Oscilloscope
Adjusting Element	RV702
Specified Value	1.00 ± 0.05 Vp-p

Note 1) VIDEO LINE OUT terminal must be terminated at 75Ω.

2) To make no signal input, insert a shorting plug into VIDEO LINE IN 2 terminal.

Adjusting method:

1) Make a no signal state and select the E-E made.
2) Connect the frequency counter to the Pin ㉔ of IC701 and adjust to 3.80 ± 0.05 MHz with RV703.
3) Input the color bar signal to make recording.
4) Playback the recorded tape portion and check that the playback Y signal level is 1.00 ± 0.05 Vp-p.



Fig, 7-9. Deviation adjustment

5) When the specified value is not met, input the color bar signal to select the E-E mode. Adjust RV702 to correct a playback Y signal level error, and then, repeat the steps 1) through 4) above.

7-5-5. White Clip and Dark Clip Adjustment (YC-122 Board)

Mode	E-E
Signal	Color bar
Measurement Point	Pin ⑳ of IC701
Measuring Instrument	Oscilloscope
Adjusting Element	White clip: RV705 Dark clip: RV704
Specified Value	White clip: 180 ± 10% Dark clip: 45±10%

Adjusting method:

1) With RV705, adjust the white clip level to 180 ± 10% of the white level (100%).
2) With RV704, adjust the dark clip level to 45 ± 10% of the white level (100%).

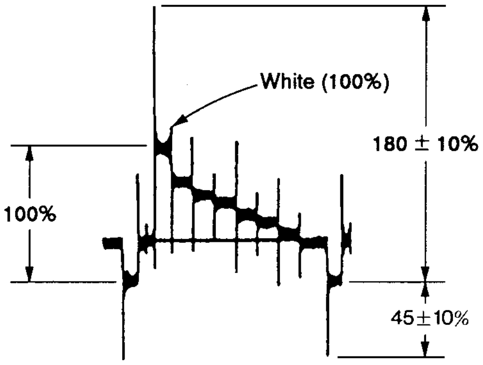


Fig. 7-10.

7-5-6. Recording Y Signal Level Adjustment (YC-122 Board/RP-63 Board)

Mode	REC
Signal	No signal
Measurement Point	Pin ③ of CN804 (RP-63 board)
Measuring Instrument	Oscilloscope
Adjusting Element	RV710 (YC-122 board)
Specified Value	1.7±0.1Vp-p

Adjusting method:

1) With RV710, adjust the Y REC RF signal level to 1.8±0.1 Vp-p.

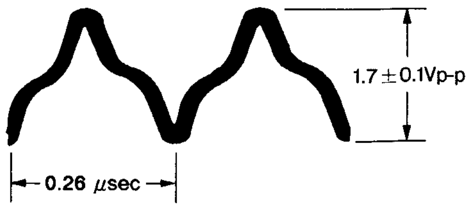


Fig. 7-11.

7-5-7. Recording Chroma Level Adjustment (YC-122 Board)

Mode	E-E
Signal	Color bar
Measurement Point	Pin ⑦ of CN704
Measuring Instrument	Oscilloscope
Adjusting Element	RV801
Specified Value	120±5mVp-p

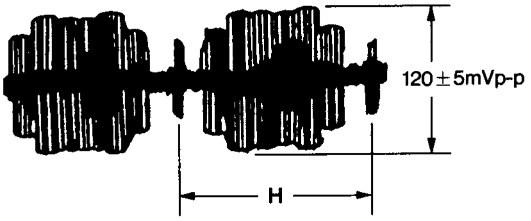


Fig. 7-12

7-6. CHARACTER GENERATOR SYSTEM ADJUSTMENTS

7-6-1. Character Generator Clock Check (OS-13 Board)

Mode	E-E
Signal	No signal
Measurement Point	Pin ㉘ of IC401
Measuring Instrument	Frequency counter
Specified Value	17.734476 MHz ± 100 Hz

Note: Attach 10 kΩ (1-249-429-11) resistor to tip of the probe.

Checking method:

1) Confirm that the clock oscillation frequency is 17.734476 MHz ± 100 Hz.

7-6-2. AFC Adjustment (OS-13 board)

Mode	E-E
Signal	No signal
Measurement Point	Pin ⑧ of IC402
Measuring Instrument	Frequency counter
Adjusting Element	RV451
Specified Value	15625 ± 50 Hz

Connection:

1) Connect Pins ① and ⑨ of IC402 with 1 kΩ resistor (1-249-417-11).

Adjusting method:

1) Adjust RV451 so that the oscillation frequency is 15625 ± 50 Hz.

7-6-3. Character Position Adjustment (OS-13 Board)

Mode	E-E (EDIT MONITOR)
Signal	Color bar
Measurement Point	EURO AV IN/OUT connector
Measuring Instrument	Monitor TV
Adjusting Element	CT401
Specified Value	Fig.7-13.

Adjusting method:

1) Adjust with CT401 so that the position of OSD is like Fig.7-13.

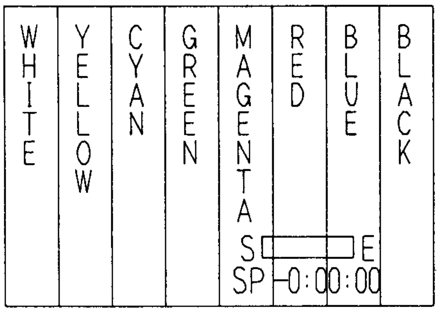

WHITE
YELLOW
CYAN
GREEN
MAGENTA
RED
BLUE
BLACK
S
E
SP -0:00:00

Fig. 7-13.

7-7. AUDIO SYSTEM ADJUSTMENTS

- Adjust the audio system in the LP mode, unless otherwise specified.
  Use the alignment tape.
- Adjust both Lch and Rch.

[Connection]

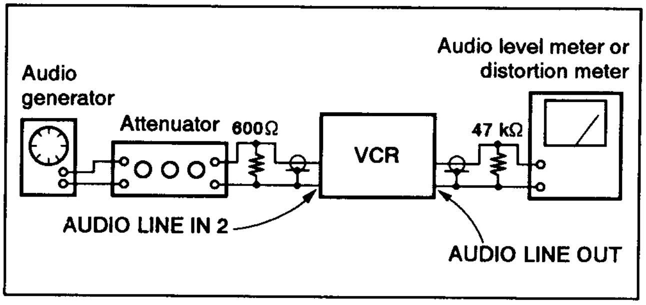

Audio generator
Attenuator
600Ω
VCR
47 kΩ
Audio level meter or distortion meter
AUDIO LINE IN 2
AUDIO LINE OUT

Fig. 7-14.

7-7-1. Hi-Fi Audio System Adjustment

- Set switches and knobs to the following positions to make adjustment unless otherwise specified.
  INPUT SELECT switch......LINE 2

[Adjusting sequence]

1. VCO fo adjustment
2. AFM deviation adjustment
3. BPF fo adjustment
4. AFM switching adjustment
5. Hi-Fi/NORMAL discrimination adjustment

1. VCO fo adjustment(HF-22 board)

Mode	REC
Signal	No signal
Measuring Instrument	Frequency counter
1.4MHz Adjustment	
Measurement Point	Pin (79) of IC201
Adjusting Element	RV202
Specified Value	1.4 MHz ± 2 kHz
1.7 MHz Adjustment	
Measurement Point	Pin (69) of IC201
Adjusting Element	RV205
Specified Value	1.8MHz±1kHz

Note: Connect the frequency counter through a probe of high input impedance (more than 10 MΩ) and low capacity (10 pF or less).

Checking method:
1) Connect the frequency counter to each measurement point.
2) Confirm that each frequency meet its specified value.

2. Deviation adjustment (HF-22 board)

The adjustment element of the right channel is indicated in [ ].

Mode	PB
Signal	Hi-Fi alignment tape
Measurement Point	AUDIO LINE OUT left [right]
Measurement Equipment	Audio level meter
Adjustment Element	RV201 [RV206]
Specified Value	-7.5 ± 0.2 dBs

Adjustment Method:
1) Make sure that "STEREO" segment lights on the fluorescent display.
2) Adjust left [right] channel audio output level to -7.5 ± 0.2 dBs using RV201 [RV2C6].

3. BPF fo adjustment (HF-22 board)

Mode	PB
Signal	Carrier Frequency : 840MHz, No modulation Input −24dBs : Pin ⑨ of CN202
Measurement Point	IC201 pin (70) (R ch) IC201 pin (78) (L ch)
Measuring Instrument	Oscilloscope
Adjusting Element	RV204

Minimize 1.4MHz at pin (78)(1.4MHz BPF OUT).

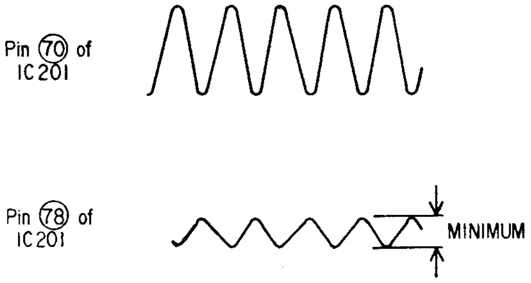


Fig. 7-15.

4. AFM switching adjustment (MA-138 Board)

Mode	PB
Signal	Hi-Fi alignment tape
Measurement Piont	Pin ① of CN608 Trigger: Pin ⑤ of CN804 (RP-63 board)
Measureing Instrument	Oscilloscope
Adjusting Element	RV101
Specified Value	A = minimum

Note: Tracking control is enter.(AUTO tracking is off.)

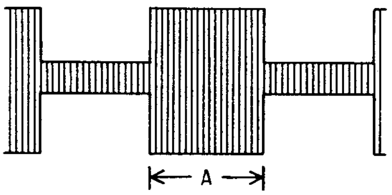


Fig. 7-16.

5. Hi-Fi/NORMAL discrimination adjustment (MA-138 Board)

Mode	Playback
Signal	Hi-Fi alignment tape
Measurement Piont	Pin ① of CN608 Trigger: Pin ⑤ of CN804 (RP-63 board)
Measureing Instrument	Oscilloscope
Adjusting Element	RV601
Specified Value	A = 300±10mVp-p

Adjusting method:

1) Maximize the HF PB RF level by pushing tracking control button.
2) Adjust with RV601 so that A is 300±10mVp-p in the side of B.

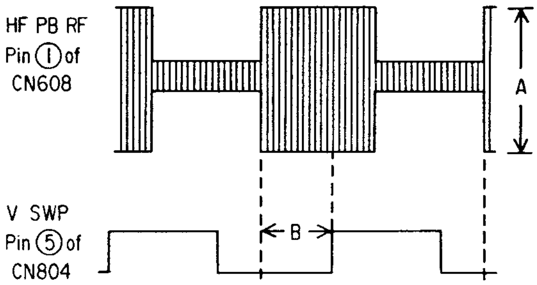


Fig. 7-17.

7-7-2. Normal Audio System Adjustment

- Make adjustment in the SP mode, unless otherwise specified. Use a normal VHS cassette for an adjustment tape.
- Make adjustment with the switches set to the following positions.
  INPUT SELECT......LINE 2
- Set the AUDIO MONITOR mode to NORMAL on the menu screen.

[Adjusting sequence]

1. ACE head adjustment......See Mechanism Block Adjustment
2. Recording bias adjustment.
3. Overall level check.

1. ACE head adjustment

See "Mechanism Block Adjustment".

2. Recording bias adjustment (MA-138 Board)

Mode	REC and PB
Signal	333Hz, −27.5dBs 7kHz, −27.5dBs
Measurement Point	AUDIO LINE OUT L or R
Measuring Instrument	Audio level meter
Adjusting Element	RV751
Specified Value	0±1dB(SLV-625/NC/NP/UB) 1±1dB(SLV-625VP)

Adjusting method:

1) Supply a signal of 333Hz, −27.5dBs to Audio Line Input.
2) Connect the audio level meter to the Audio Line Output.
3) Adjust the attenuator so that the audio level meter will indicate −27.5dBs
4) Make recording in the SP mode.
5) Set an audio line input signal to 7 kHz and make recording.
6) Playback a recorded portion, and measure output levels at 333Hz and 7 kHz.
7) Confirm that the 7 kHz playback output levels within a range of the 333Hz playback output level 0±1 dB (SLV-625/NC/NP/UB) or 1±1 dB(SLV-625VP). When beyond this range, adjust RV751 and repeat the step 1) through 7) above.

3. Overall level check

Mode	REC and PB
Signal	333Hz, −7.5dBs
Measurement Point	AUDIO LINE OUT L or R
Measuring Instrument	Audio level meter and distortion factor gauge
Specified Value	Playback level: -7.5 ± 3dBs Distortion factor: 4% or less

Confirming method:

1) Supply an audio signal of 333Hz, -7.5dBs simultaneously to both L and R channels of Audio Line Input.
2) Make recording.
3) Playback a recorded portion.
4) Confirm that a playback level is -7.5 ± 3 dBs.

7-8. TUNER SYSTEM ADJUSTMENTS

7-8-1. RF AGC Adjustment (IF501 Unit/MA-138 Board)

Signal	Broadcast TV signal
Adjusting Element	VR of IF501 unit(Fig. 7-18)

Adjusting method:

1) Adjust the monitor TV to a maximum contrast.
2) Turn the VR to make snow noise visible.
3) Turn the VR in an opposite direction and set it to the point where the snow noise disappears.
4) Receive each channel and confirm that there are no beat picture corruption snow noise due to cross modulation.

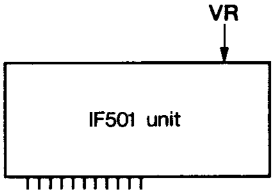


Fig. 7-18.

7-8-2. Receive Separation Adjustment (MA-138 Board)

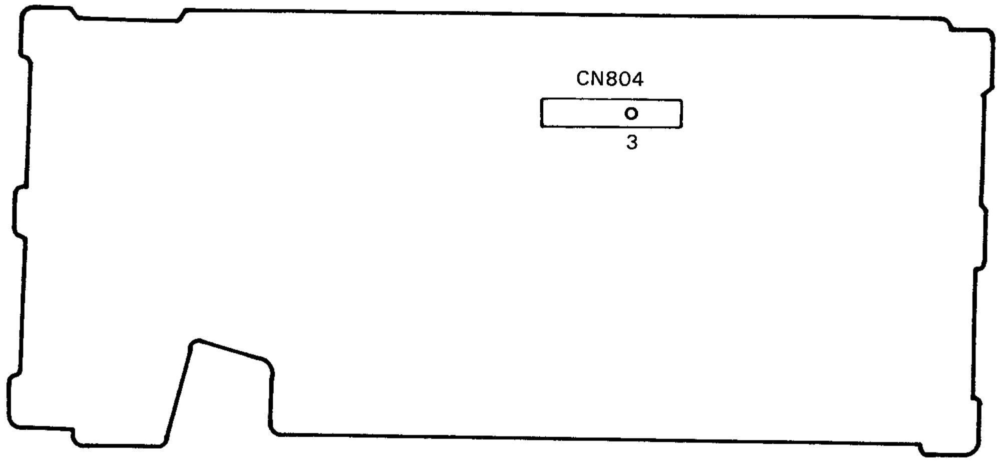
Signal	Stereo Lch: 400 Hz, 100% modulation Rch: No modulation
Connection Point	AUDIO LINE OUT R
Measuring Instrument	Oscilloscope
Adjusting Element	RV501

Adjusting method:

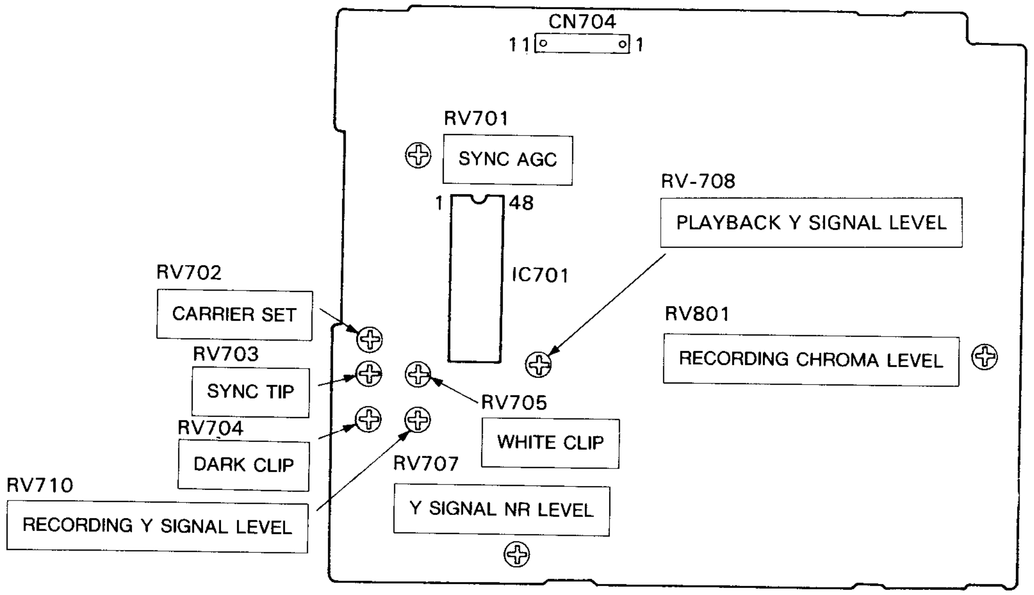
1) Set the sound multiplex signal generator in the Stereo mode, and set only Lch to 400 Hz, 100% modulation.
2) Connect the oscilloscope to the Rch of Audio Line Output.
3) Adjust RV501 to minimize Rch output.
When this is done, do not fully turn RV501
(The "STEREO" indication must be illuminated).

7-9. ARRANGEMENT DIAGRAM FOR ADJUSTMENT PARTS

RP-63 BOARD (COMPONENT SIDE)

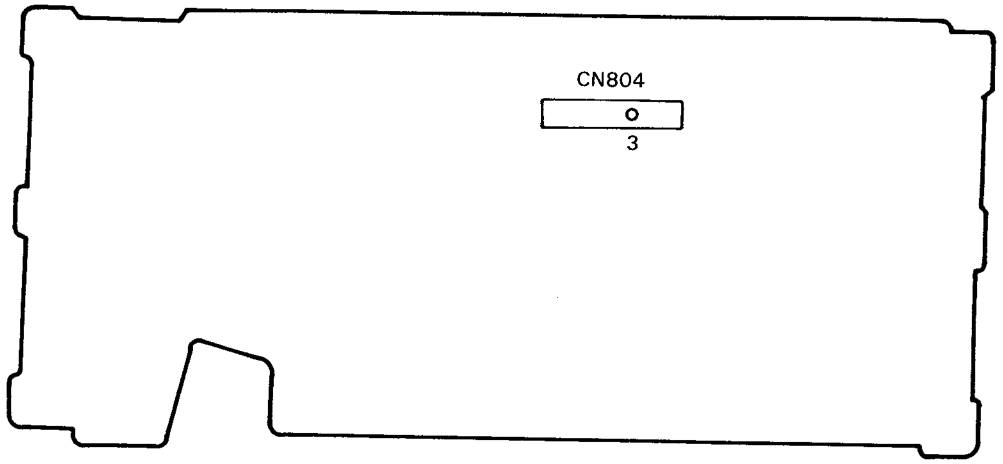


YC-122 BOARD (COMPONENT SIDE)

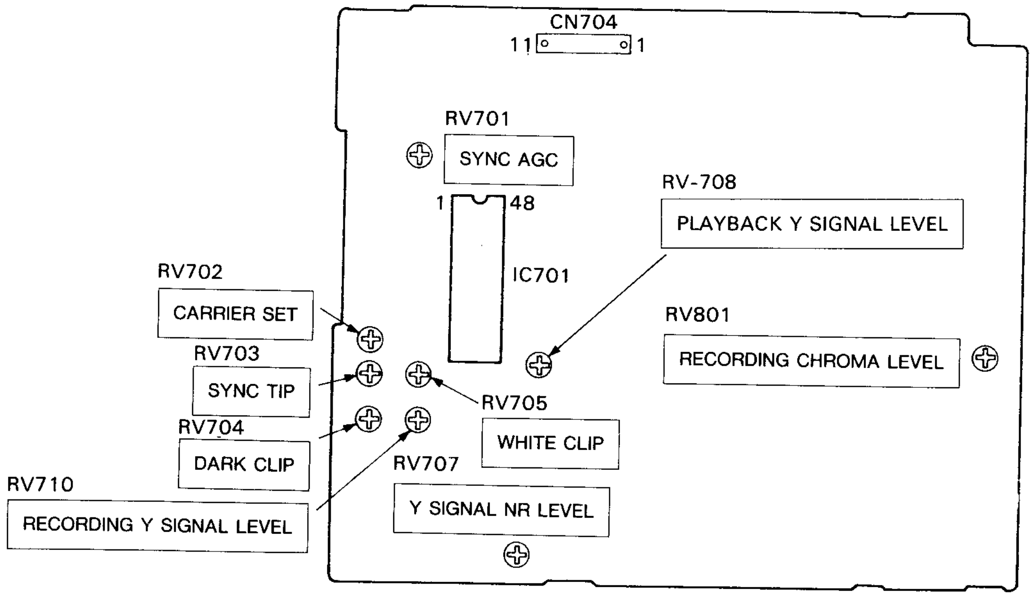

CN704
11
1
RV701
SYNC AGC
1
48
IC701
RV-708
PLAYBACK Y SIGNAL LEVEL
RV801
RECORDING CHROMA LEVEL
RV702
CARRIER SET
RV703
SYNC TIP
RV704
DARK CLIP
RV705
WHITE CLIP
RV707
Y SIGNAL NR LEVEL
RV710
RECORDING Y SIGNAL LEVEL

7-9. ARRANGEMENT DIAGRAM FOR ADJUSTMENT PARTS

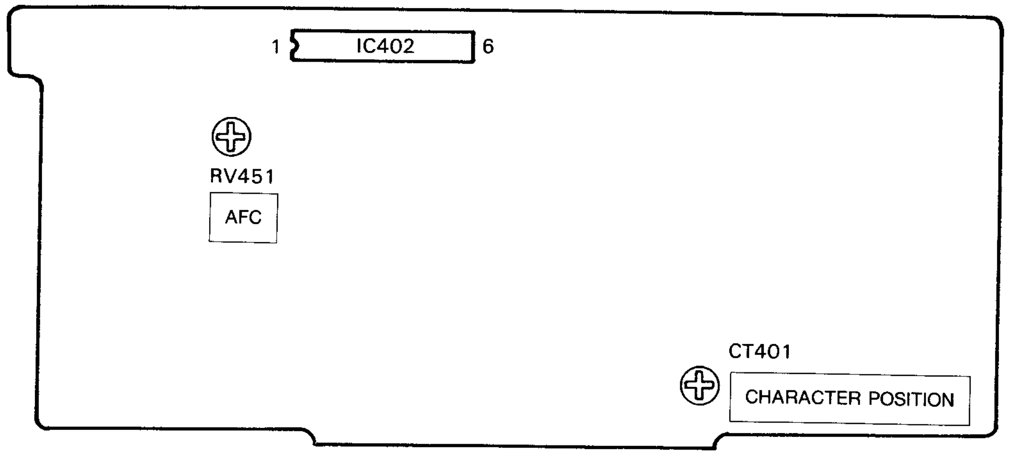
RP-63 BOARD (COMPONENT SIDE)



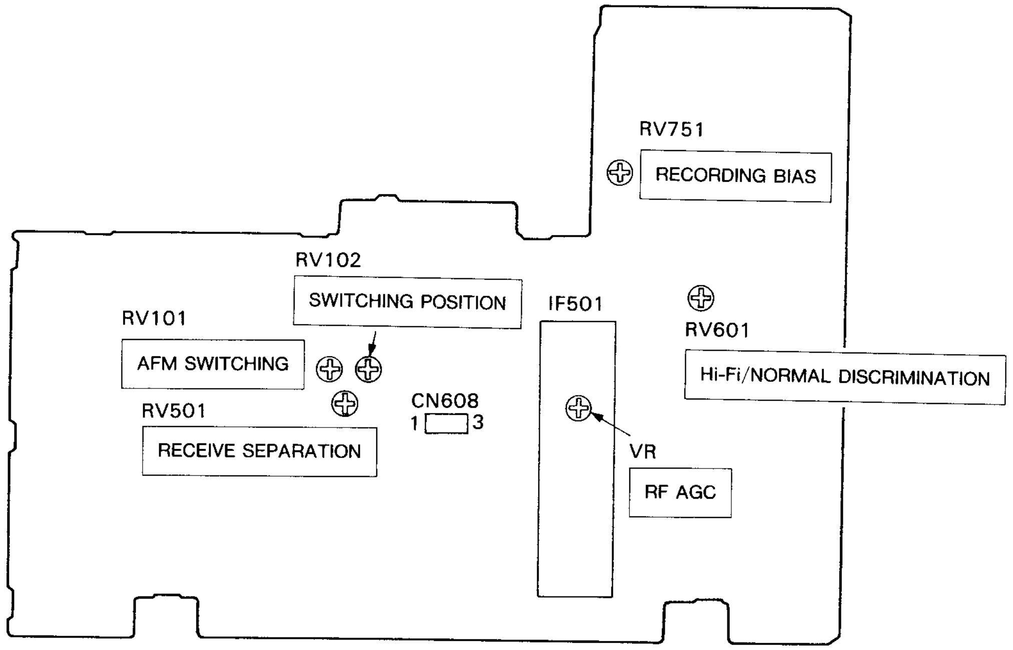
YC-122 BOARD (COMPONENT SIDE)


CN704
11
1
RV701
SYNC AGC
1
48
IC701
RV-708
PLAYBACK Y SIGNAL LEVEL
RV801
RECORDING CHROMA LEVEL
RV702
CARRIER SET
RV703
SYNC TIP
RV704
DARK CLIP
RV710
RECORDING Y SIGNAL LEVEL
RV705
WHITE CLIP
RV707
Y SIGNAL NR LEVEL

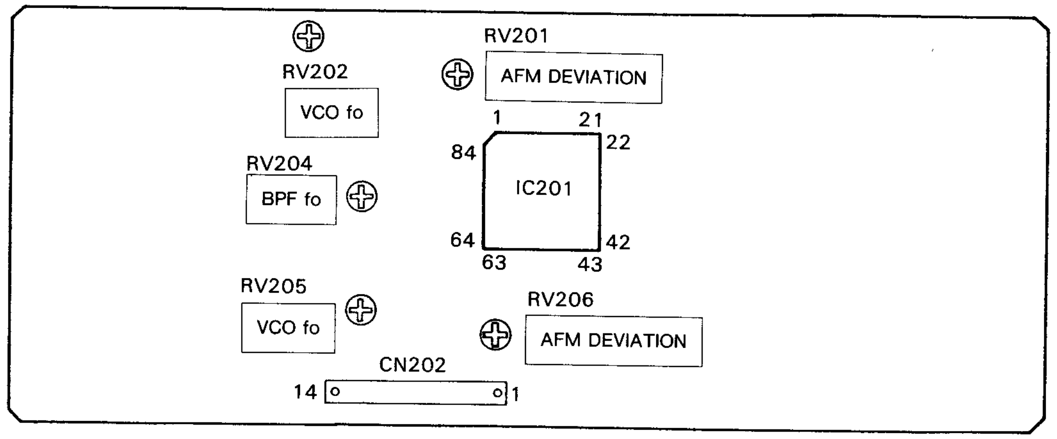
OS-13 BOARD (COMPONENT SIDE)


1
IC402
6
RV451
AFC
CT401
CHARACTER POSITION

MA-138 BOARD (COMPONENT SIDE)


RV751
RECORDING BIAS
RV102
SWITCHING POSITION
IF501
RV101
AFM SWITCHING
RV601
Hi-Fi/NORMAL DISCRIMINATION
RV501
RECEIVE SEPARATION
CN608
1
3
VR
RF AGC

HF-22 BOARD (COMPONENT SIDE)


RV201
AFM DEVIATION
RV202
VCO fo
1
21
22
84
IC201
RV204
BPF fo
64
42
63
43
RV205
VCO fo
RV206
AFM DEVIATION
CN202
14
1